User's Manual

PPC-815
POS-815

Copyrights

©2008 EBN Technology Corp. All rights reserved. The information in this document is subject to change without prior notice in order to improve reliability, design and function and does not represent a commitment on the part of the manufacturer.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

All trademarks are property of their respective owners

Liability Disclaimer

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

Regulatory Information

FCC Notices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Increase the separation between the equipment and the receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio or television technician for help.

This device complies with Part 15 (B) of the FCC Rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference and

2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS DEVICE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE DEVICE.

CE Notice

This device complies with **EMC Directive 2004/108/EC** issued by the Commission of the European Community.

WEEE Notice

The **WEEE** mark applies only to countries within the European Union (EU) and Norway.
This appliance is labeled in accordance with **European Directive 2002/96/EC** concerning **waste electrical and electronic equipment** (**WEEE**). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

Contents

Copyrights i
Liability Disclaimer i
Regulatory Information i
FCC Notices i
CE Notice i
WEEE Notice ii
Contents iii
1. Features 1
2. Unpacking the Box 2
3. Hardware Setup 3
3.1. Quick Tour 3
Front View 3
Back View 4
Back Panel I/O 4
3.2. Connect Battery Pack (Optional) 5
3.3. Peripherals Installation 8
Power Adapter 8
USB Mouse, USB Keyboard and USB ODD 8
LAN Cable 8
Cash Drawer 9
MSR 9
VFD 10
4. Driver and Utility Installation 14
4.1. Before the installation 14
4.2. Chipset Software Installation 14
4.3. VGA Driver Installation 16
4.4. LAN Driver Installation 18
4.5. Audio Driver Installation 19
4.6. Wireless LAN Driver Installation 20
5. Power Management 22
5.1. Enter Power Option Properties Sheet 22
5.2. How to Set Power Options 23
Power Schemes 23
Alarms 24
Power Meter 26
Advanced 27
Hibernate 27
6. TouchKit Utility Quick Guide 28

6.1. Launch TouchKit Utility 28
6.2. General 29
6.3. Settings 30
6.4. Display 33
6.5. Edge Compensation 36
6.6. How to Use Event Selector 38
7. I/O Definition 39
7.1. Power Connector 39
7.2. Serial Port 39
7.3. PS2/COM 40
7.4. Cash Drawer 40
8. BIOS setup 42
8.1. System Time and System Date Adjustment 43
8.2. Serial ports Configuration 43
8.3. Boot Device Configuration 43
8.4. Save Configuration Changes and Exit 44
9. Specification 45

1.

Features

- Intel® low power consumption and high performance technology
- Durable ultra-slim & robust die-casting aluminum chassis
- Smart Battery Backup (Optional) - supply voltage without any external power supply
- easy upgrade and assembly/disassembly
- 4x USB 2.0,1 x RS-485/422/232, 3x RS-232, Gigabit Ethernet port (RJ-11) and cash drawer port (RJ-11) equipped
- Wireless LAN supported
- Microsoft Windows series operation system (Windows XP Home Edition, Windows XP Professional Edition and WEPOS) and open-source Linux operation system drivers ready.

2.

Unpacking the Box

Verify that the box contains the following items.

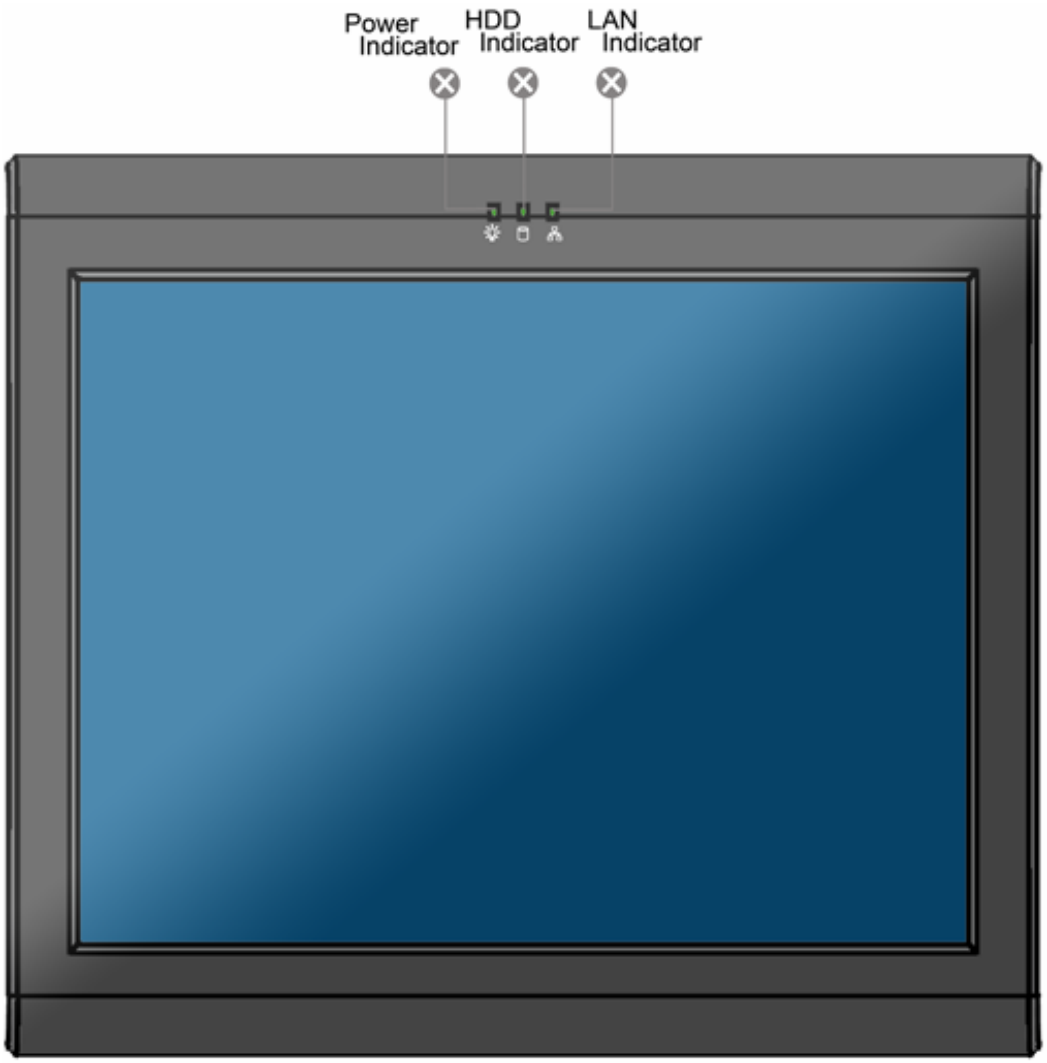
1	Greenland-70 All-in-One Touch POS System X 1
2	Power Adaptor X 1
3	Power Cord X 1
4	Driver and utility CD X 1

3.

Hardware Setup

3.1. Quick Tour

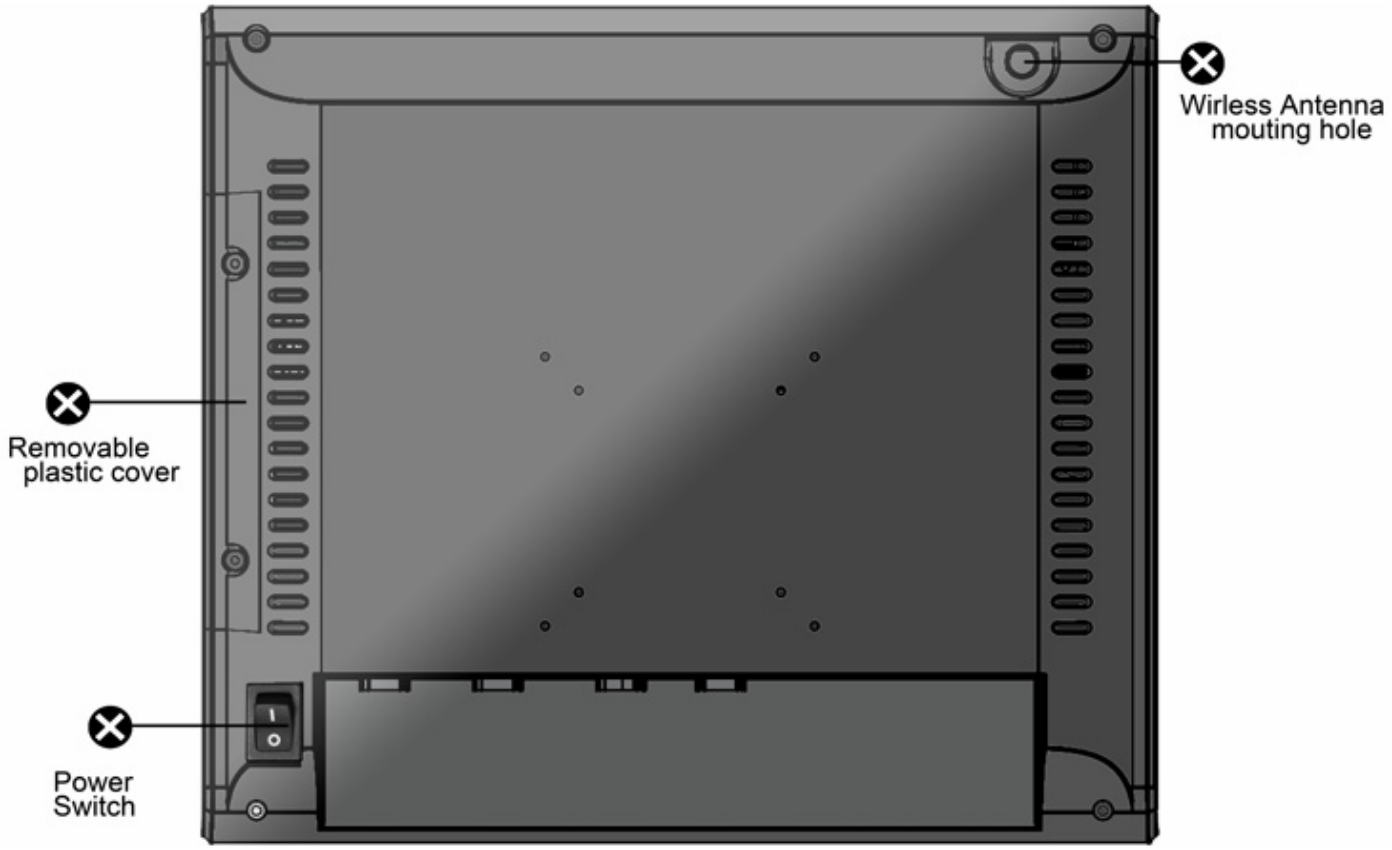
Front View



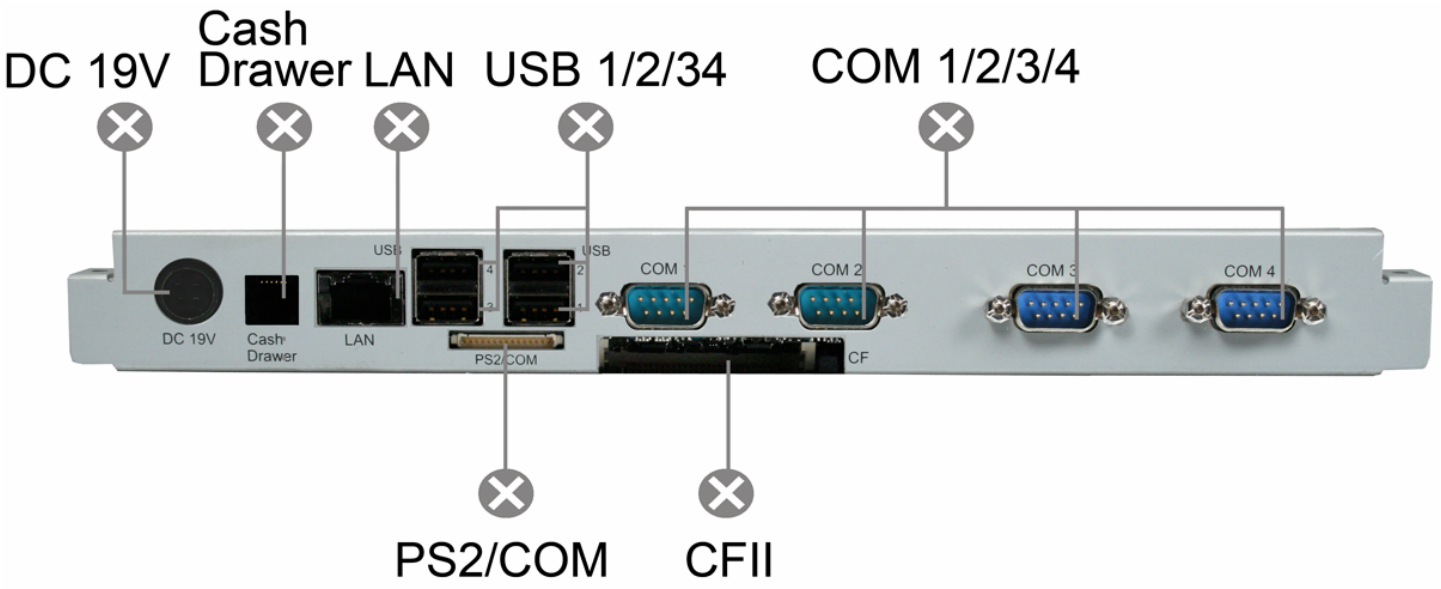
LED Indicator

	The **Power** indicator will glow green when power is on.
	The **HDD** indicator will blink green when the HDD is accessed.
	The **LAN** indicator will blink green when transferring data though the LAN.

Back View



Back Panel I/O



Note: For details of I/O ports on the back panel, please refer to Chapter 7 – I/O Definition.

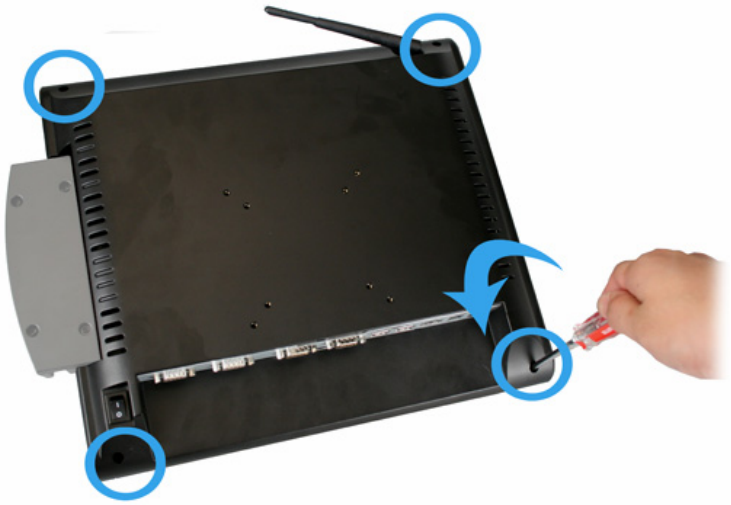
3.2. Connect Battery Pack (Optional)

Before power-on the device, please connect the battery to the mainboard:

1. Loosen the bolt.

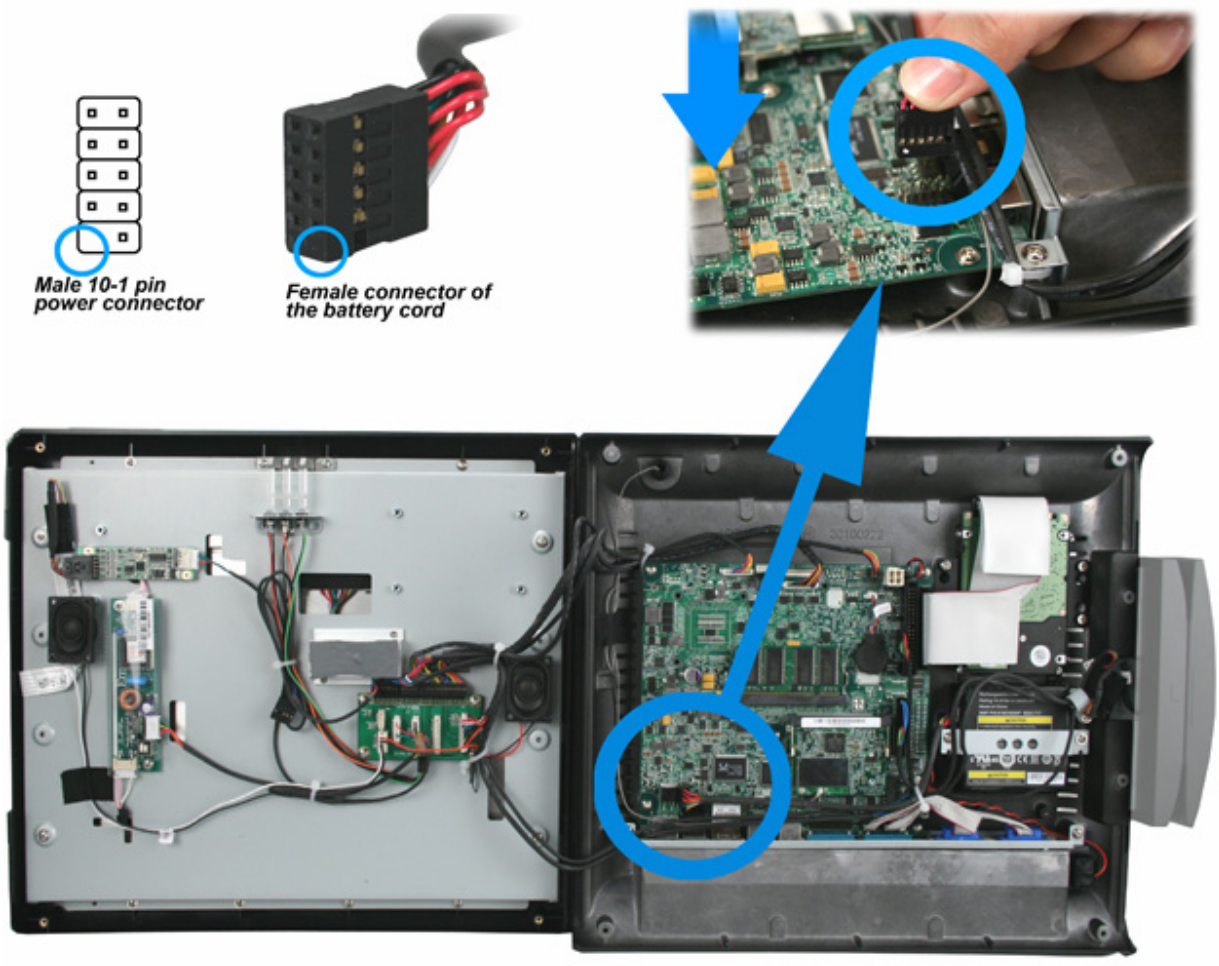
2. Remove the device from the base unit.

3. Un-tighten two screws on the back panel anticlockwise.

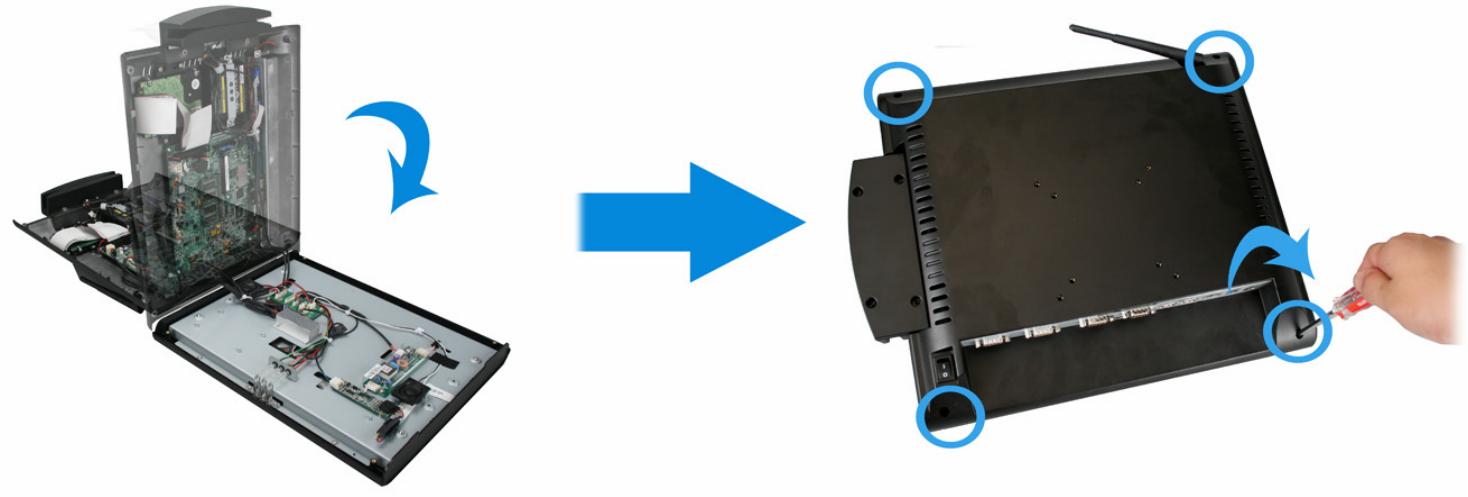


4. Open the back panel.

5. Plug the power cable to the 9-pin power connector in the correct orient.



6. Close the back panel and tighten two screws on the back panel.



7. Put the device onto the base unit.

8. Tighten the bolt.

3.3. Peripherals Installation

Power Adapter

Connect the 4-pin output jack of the adapter to the **DC 19V** jack on the back panel of the device.

USB Mouse, USB Keyboard and USB ODD

Connect your USB Mouse, USB Keyboard and USB ODD to **USB** ports on the back panel of the device.

LAN Cable

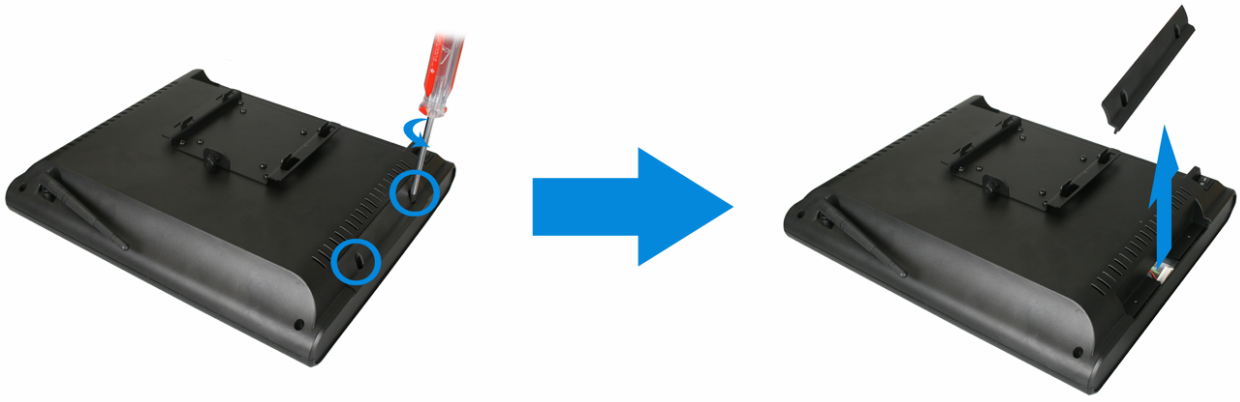
Connect one end of RJ-45 LAN cable to the **LAN** port on the back panel of the device, another end to your internet device.

Cash Drawer

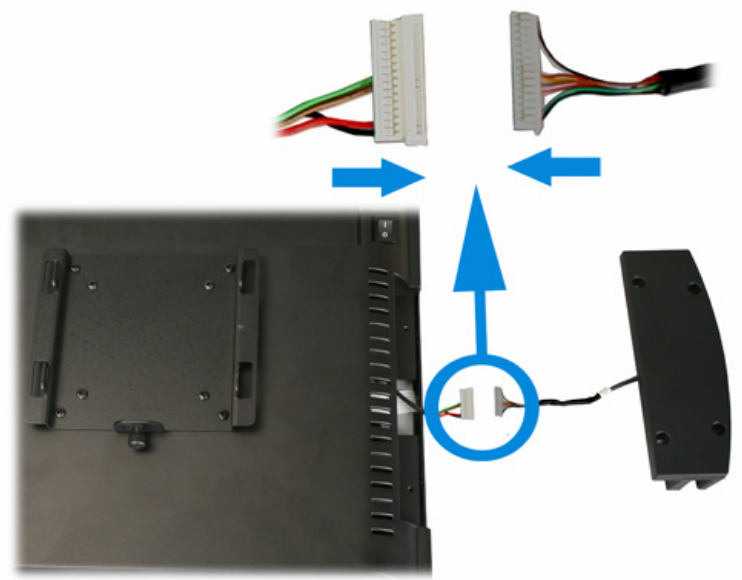
Connect one end of RJ-11 cable to the **Cash Drawer** port on the back panel of the device, another end to your cash drawer.

MSR

1. Loosen the two screws and remove the plastic cover as shown.

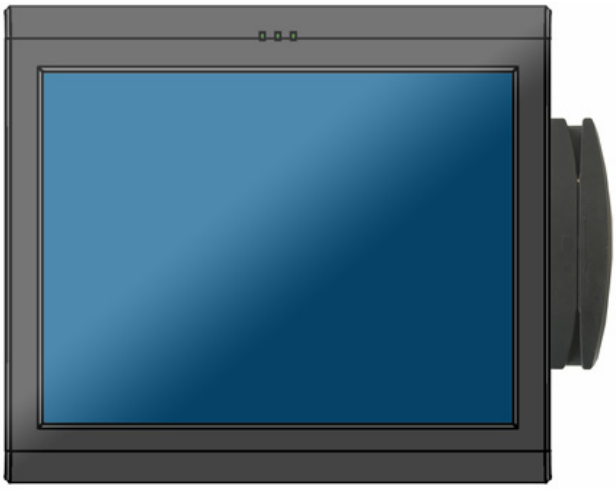


2. Pull out the connector from the device and connect to the MSR.



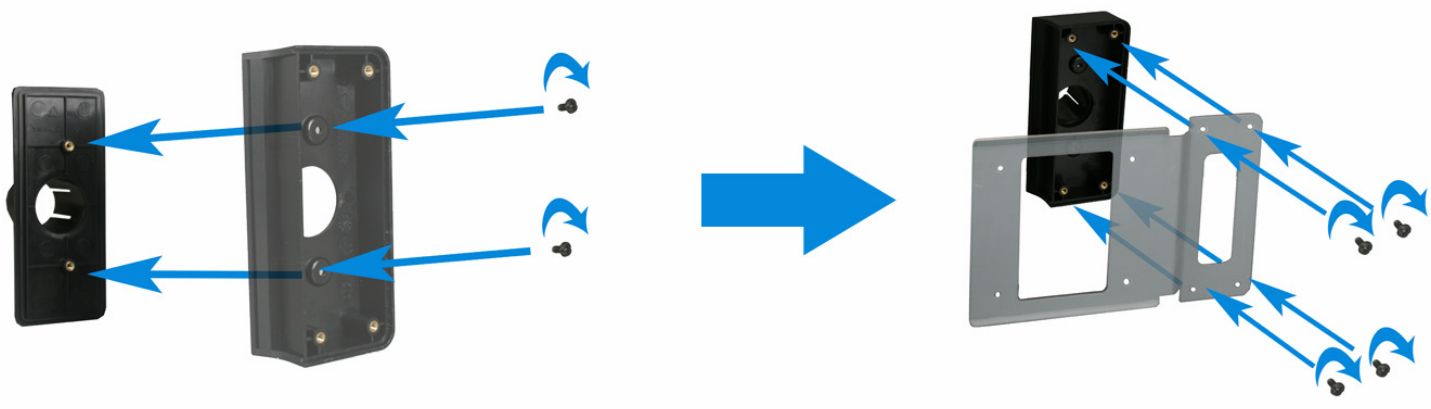
3. Tighten the two screws to fix the MSR as shown.

4. Finished.

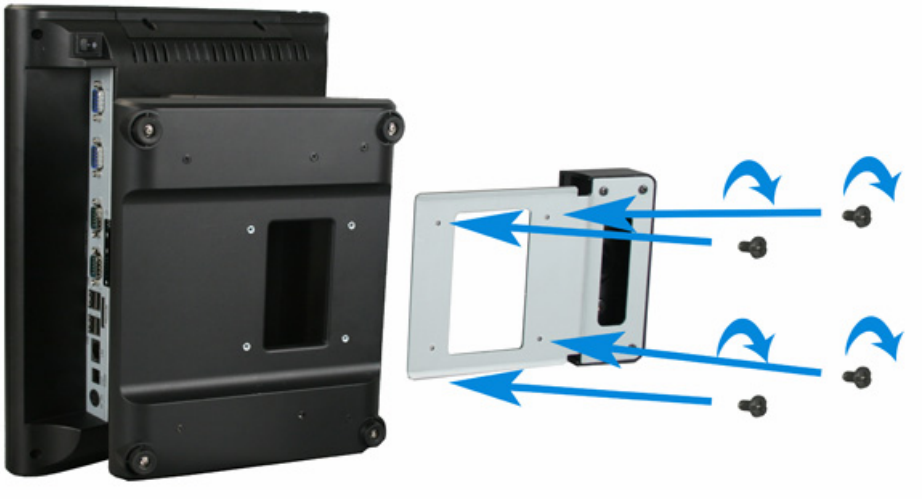


VFD

1. Assemble the parts of VFD as shown.

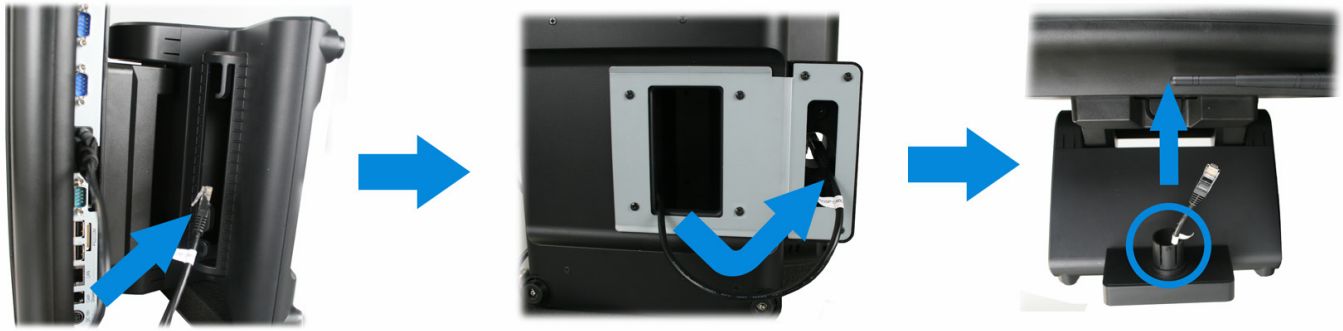


2. Install the part assembled in the Step1 to the device as shown.



3. Connect the VFD cable to the COM port as shown.

4. Pass the VFD cable through the base unit as shown.



5. Assemble other parts of VFD as shown below.

Note:

1. Be sure to adjust BIOS setting of COM port to supply 12V power.

2. For other info of VFD, Please refer to Customer Display manual.

6. Finished.

3.4 Turn on the Device

1. Make sure all peripherals are connected properly.

2. Press and hold the power switch until the power indicator on the front panel glow green.

4.

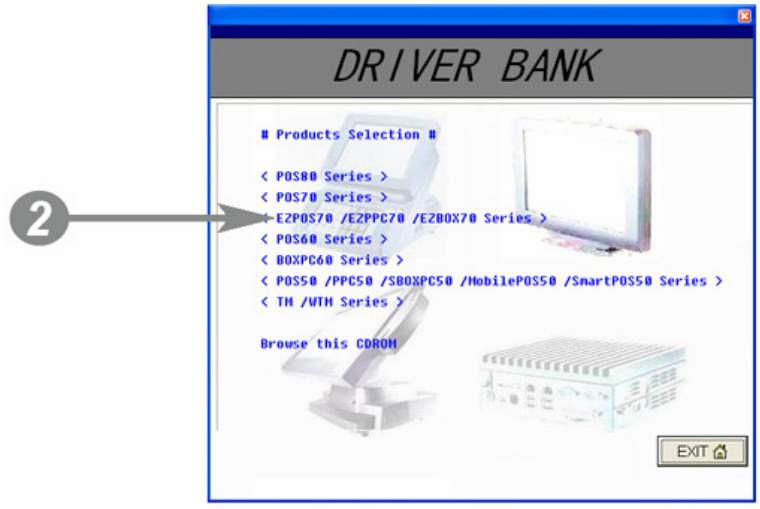
Driver and Utility Installation

4.1. Before the installation

All installation procedures described below are based on Microsoft Windows XP.

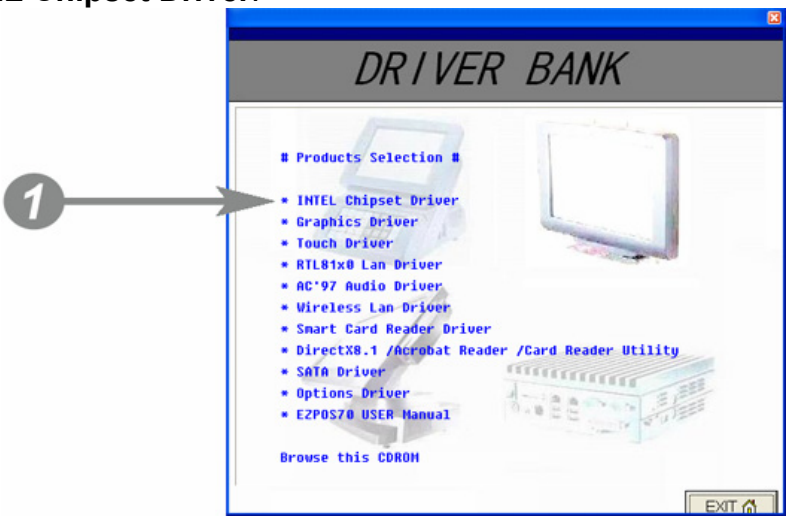
1. Connect an external USB CDROM drive to the USB port and insert the driver CD and turn on the device. The program autoruns and displays the ***DRIVER BANK*** screen.

2. Click the proper product item.

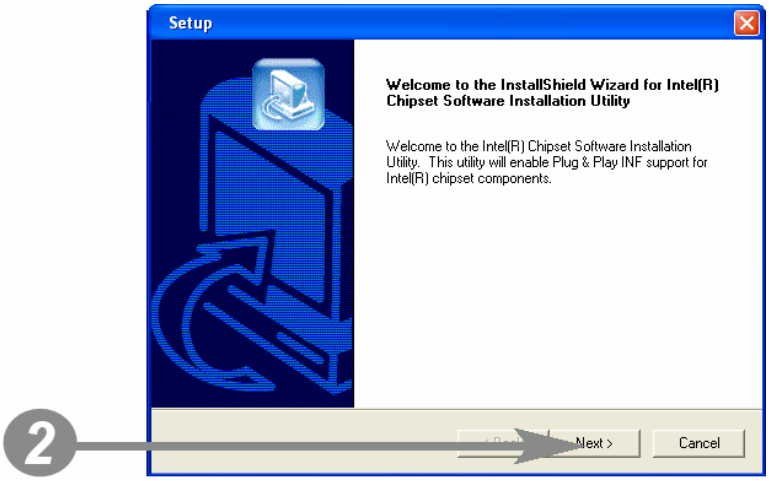


4.2. Chipset Software Installation

1. Click **INTEL Chipset Driver**.

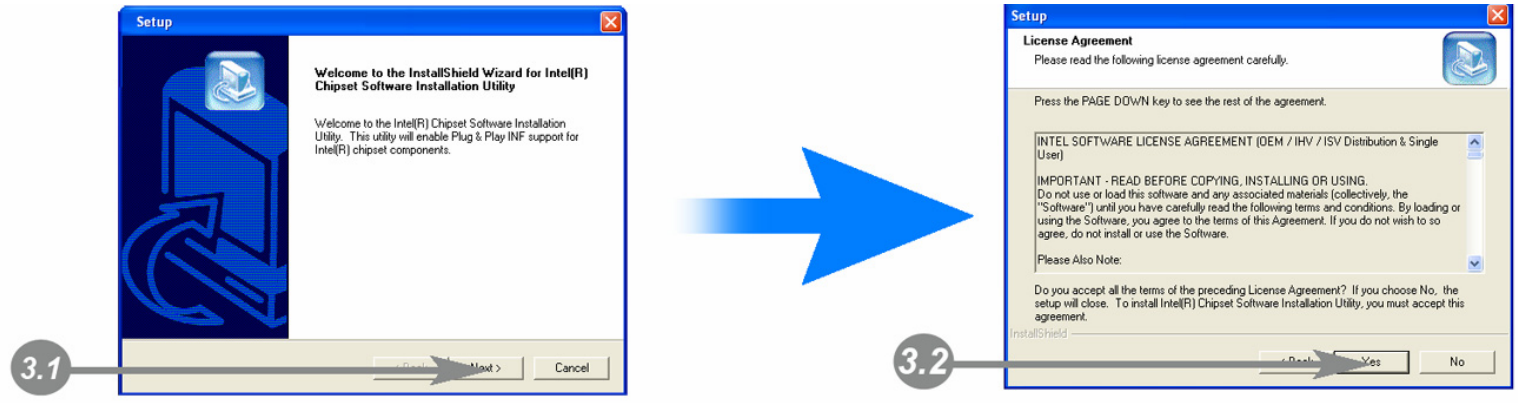


2. Click **Next**.

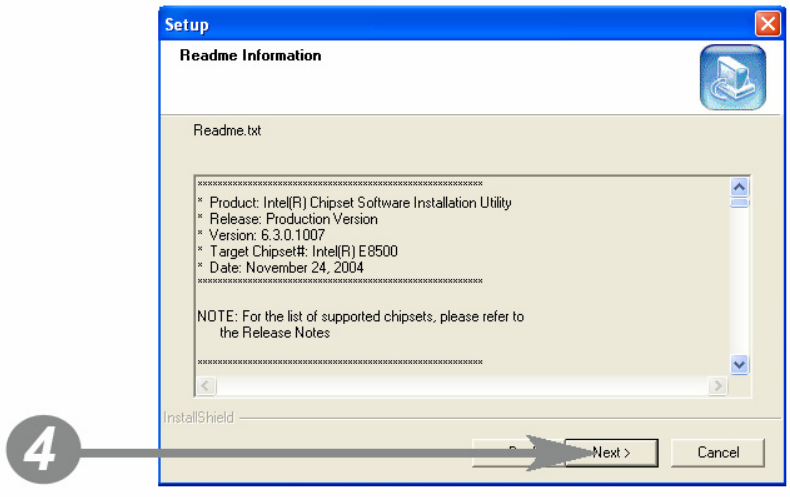

Setup
Welcome to the InstallShield Wizard for Intel(R) Chipset Software Installation Utility
Welcome to the Intel(R) Chipset Software Installation Utility. This utility will enable Plug & Play INF support for Intel(R) chipset components.
Next >
Cancel
2

3.1. Click **Next**.

3.2. Read the License Agreement carefully and click **Yes**.

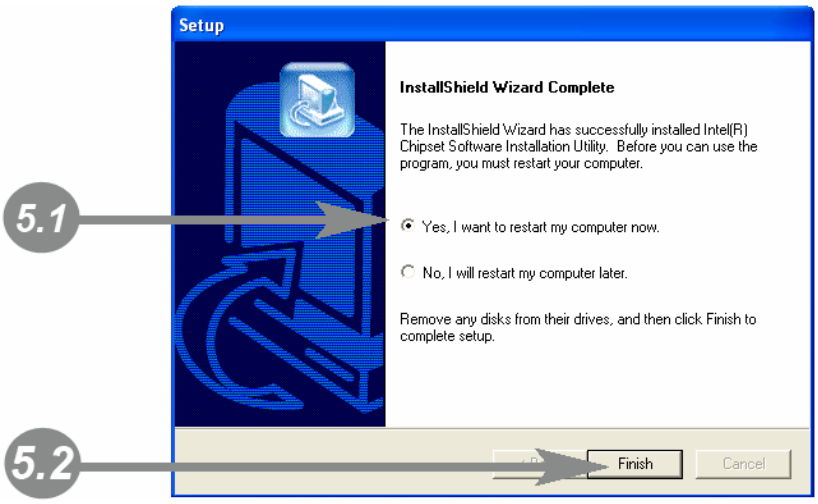

Setup
Welcome to the InstallShield Wizard for Intel(R) Chipset Software Installation Utility
Welcome to the Intel(R) Chipset Software Installation Utility. This utility will enable Plug & Play INF support for Intel(R) chipset components.
Next >
Cancel
3.1
Setup
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Intel(R) Chipset Software Installation Utility, you must accept this agreement.
InstallShield
Yes
No
3.2

4. Click **Next**.



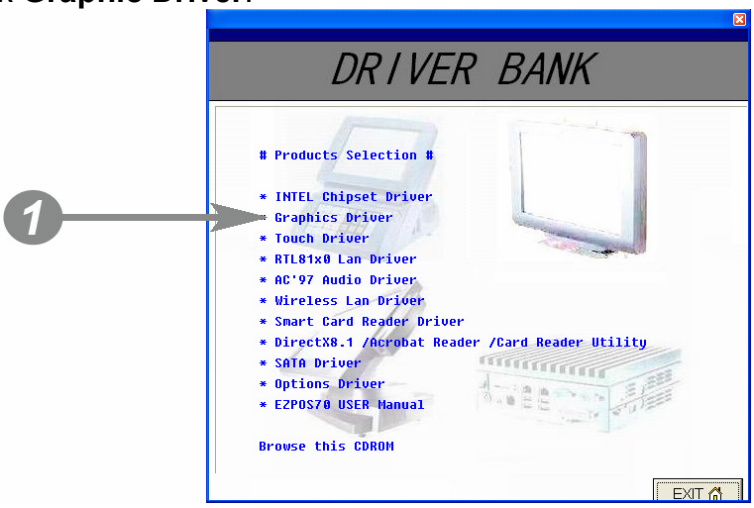
5.1. Select restart your computer right now or later.

5.2. Click **Finish**.

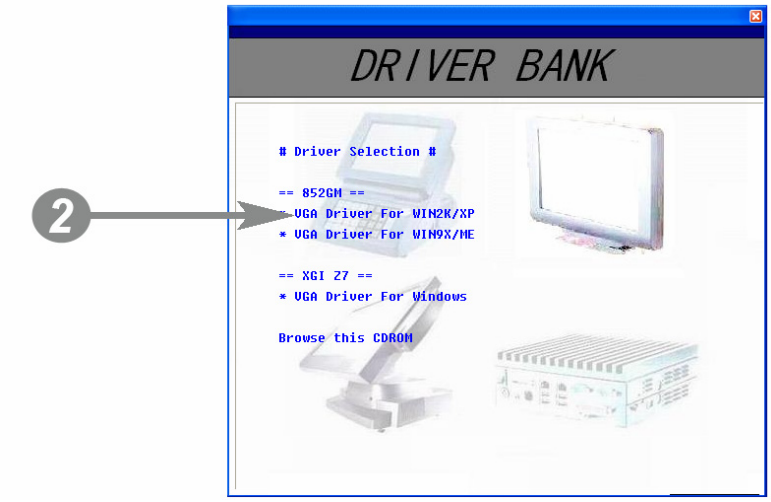

Setup
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Intel(R) Chipset Software Installation Utility. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
Finish
Cancel
5.1
5.2

4.3. VGA Driver Installation

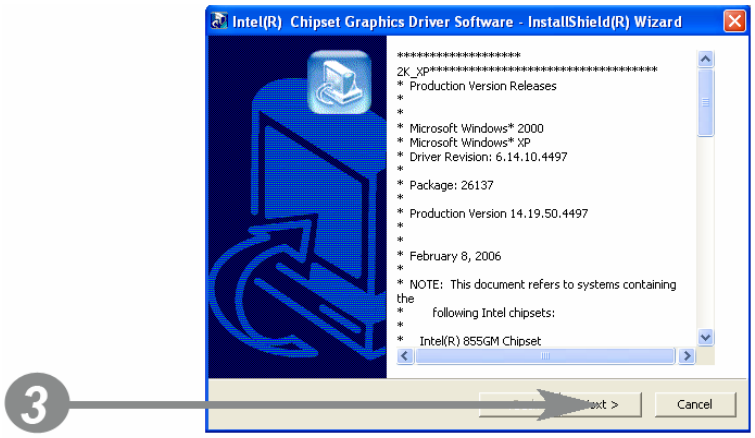
1. Click **Graphic Driver**.



2. Click **VGA Driver for WIN2K/XP**.

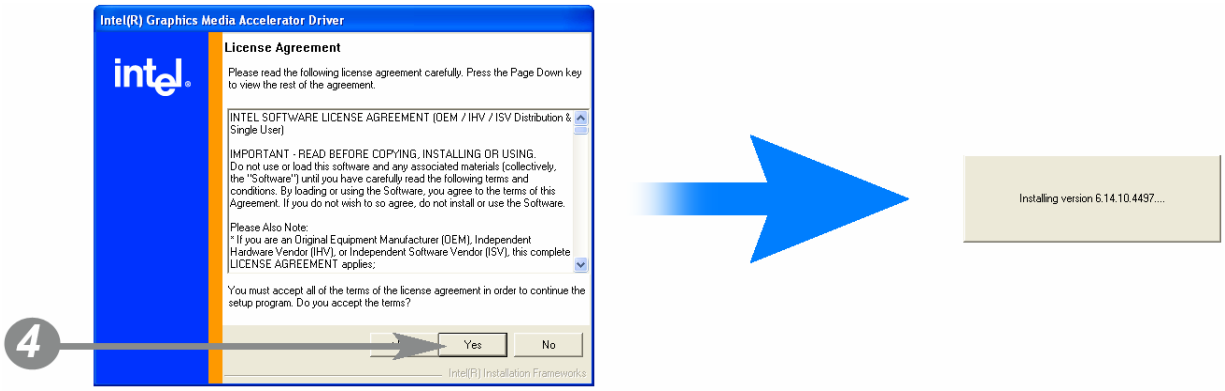


3. Click **Next**.


Intel(R) Chipset Graphics Driver Software - InstallShield(R) Wizard
2K_XP
* Production Version Releases
* Microsoft Windows* 2000
* Microsoft Windows* XP
* Driver Revision: 6.14.10.4497
* Package: 26137
* Production Version 14.19.50.4497
* February 8, 2006
* NOTE: This document refers to systems containing the following Intel chipsets:
* Intel(R) 855GM Chipset
Cancel
3

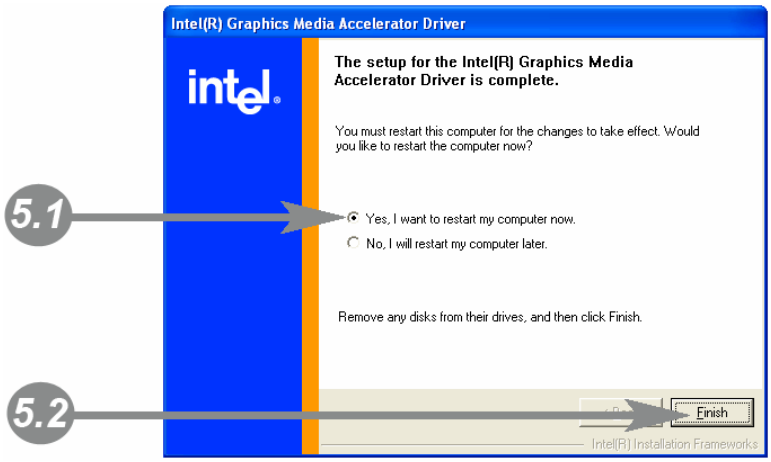
3.1. After files extracted, click **Next** on the welcome screen.

4. Read the License Agreement carefully and click **Yes**, and then the installation starts.


Intel(R) Graphics Media Accelerator Driver
License Agreement
Please read the following license agreement carefully. Press the Page Down key to view the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
Yes
No
Intel(R) Installation Frameworks
4
Installing version 6.14.10.4497....

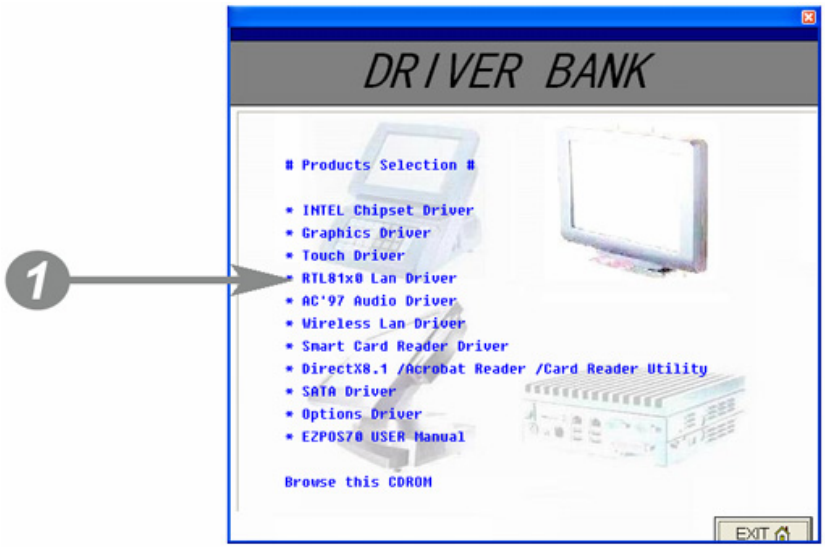
5.1. Select restart your computer right now or later.

5.2. Click **Finish**.


Intel(R) Graphics Media Accelerator Driver
The setup for the Intel(R) Graphics Media Accelerator Driver is complete.
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish.
Finish
Intel(R) Installation Frameworks
5.1
5.2

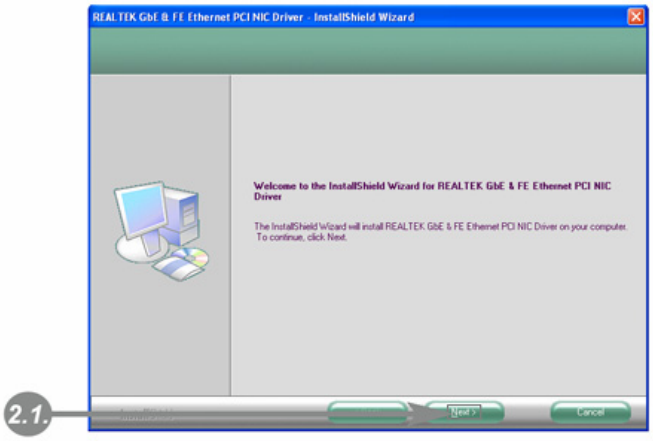
4.4. LAN Driver Installation

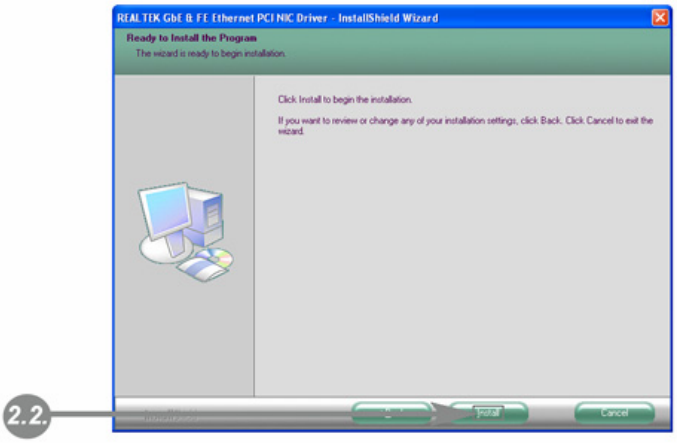
1. Click **RTL81x0 LAN Driver**.



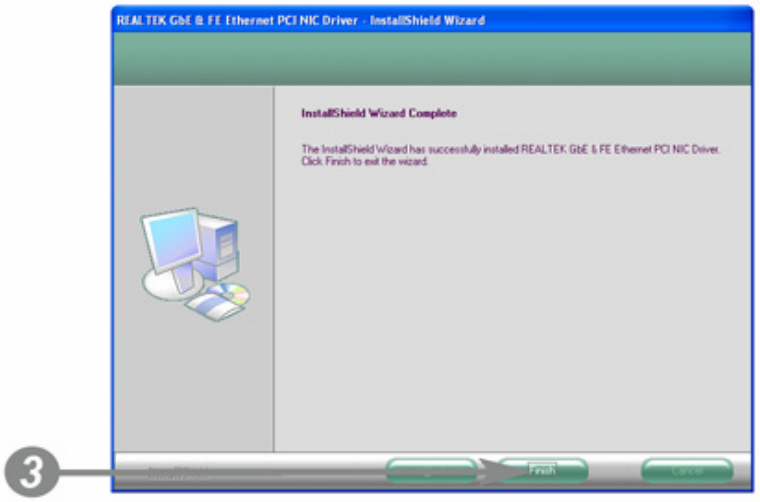
1.1. On the welcome screen, click **Next**.

1.2. Click Install to begin the installation.


REALTEK GbE & FE Ethernet PCI NIC Driver - InstallShield Wizard
Welcome to the InstallShield Wizard for REALTEK GbE & FE Ethernet PCI NIC Driver
The InstallShield Wizard will install REALTEK GbE & FE Ethernet PCI NIC Driver on your computer. To continue, click Next.
Next
Cancel
2.1.

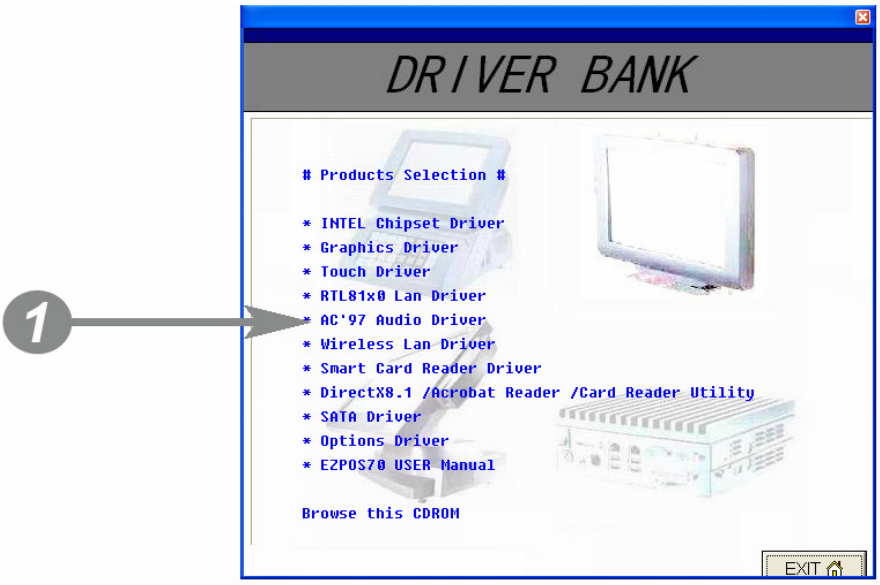

REALTEK GbE & FE Ethernet PCI NIC Driver - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Install
Cancel
2.2.

3. Click **Finish**.

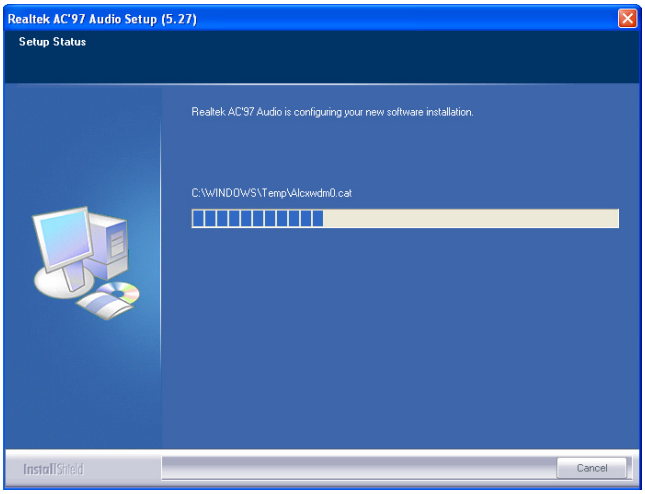

REALTEK GbE & FE Ethernet PCI NIC Driver - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed REALTEK GbE & FE Ethernet PCI NIC Driver. Click Finish to exit the wizard.
Finish
Cancel
3

4.5. Audio Driver Installation

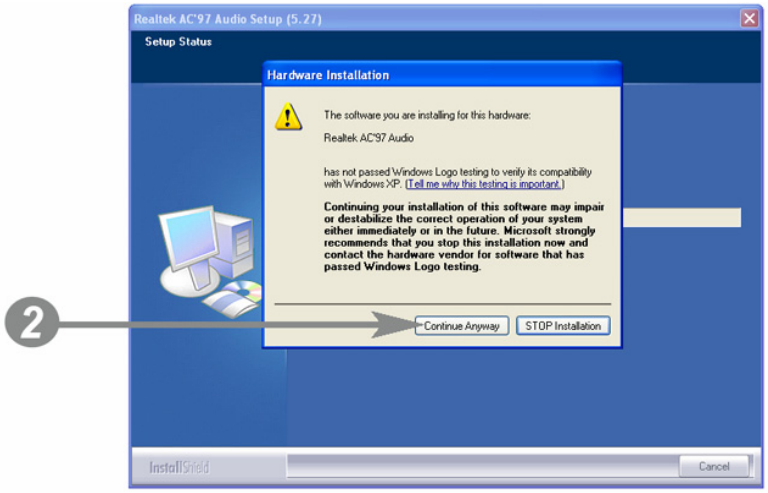
1. Click **AC'97 Audio Driver.**



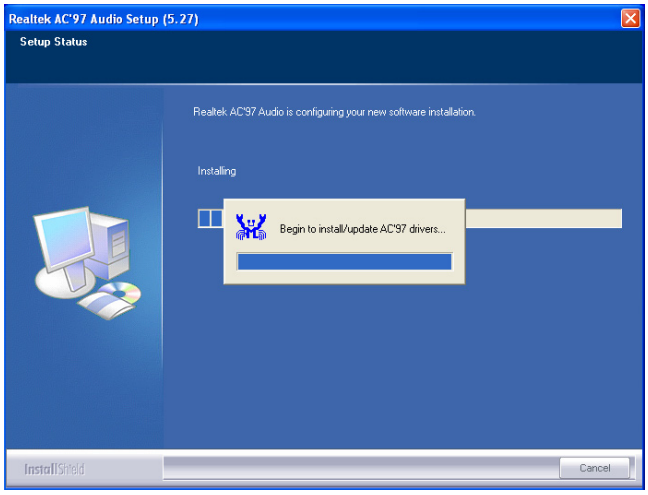
2. Configures new software installation.



3. Click **Configure Anyway**.

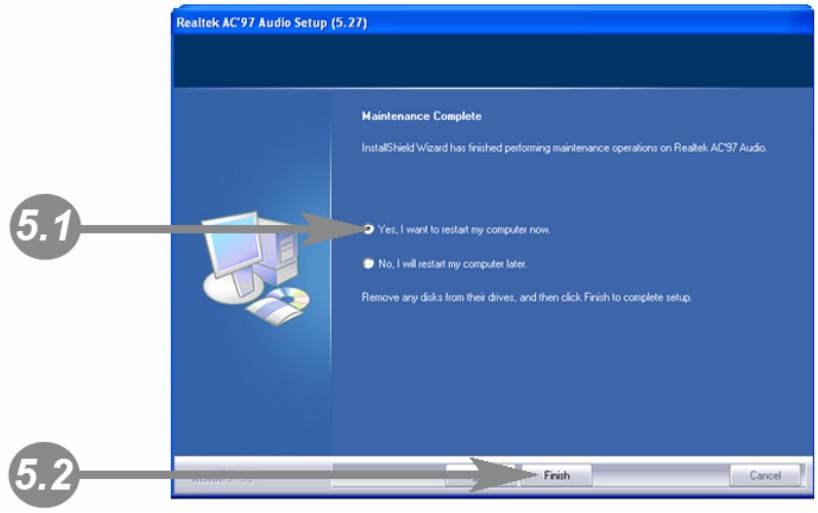

Realtek AC'97 Audio Setup (5.27)
Setup Status
Hardware Installation
The software you are installing for this hardware:
Realtek AC'97 Audio
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation
InstallShield
Cancel
2

4. AC’97 drivers begins to install.



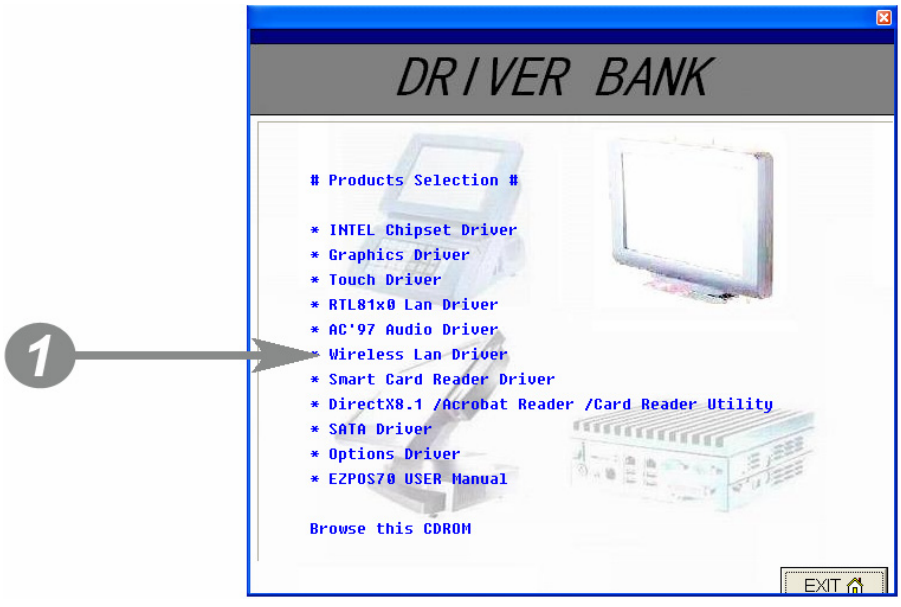
5.1. Select restart your computer right now or later.

5.2. Click **Finish**.

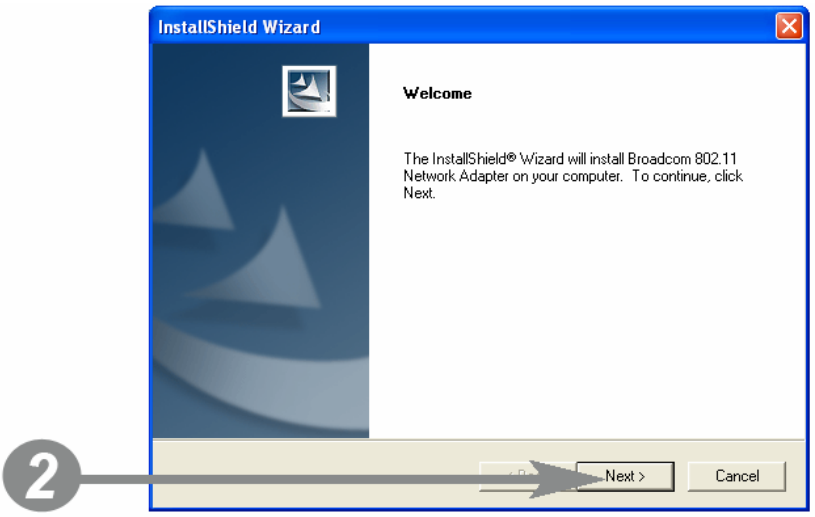

Realtek AC'97 Audio Setup (5.27)
Maintenance Complete
InstallShield Wizard has finished performing maintenance operations on Realtek AC'97 Audio.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
5.1
5.2
Finish
Cancel

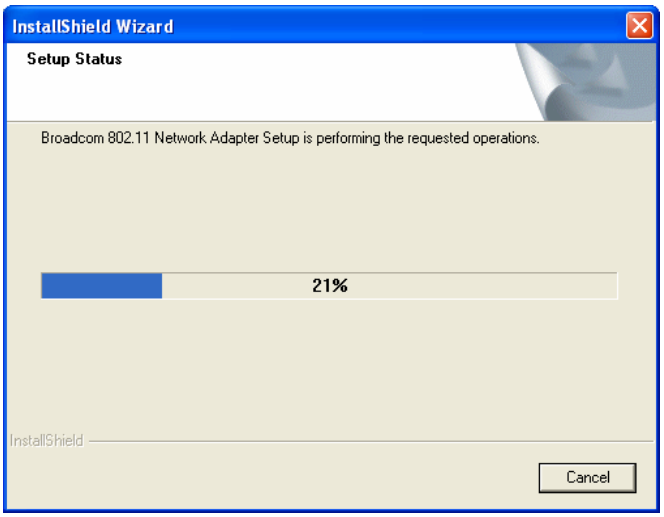
4.6. Wireless LAN Driver Installation

1. Click **Wireless LAN Driver.**



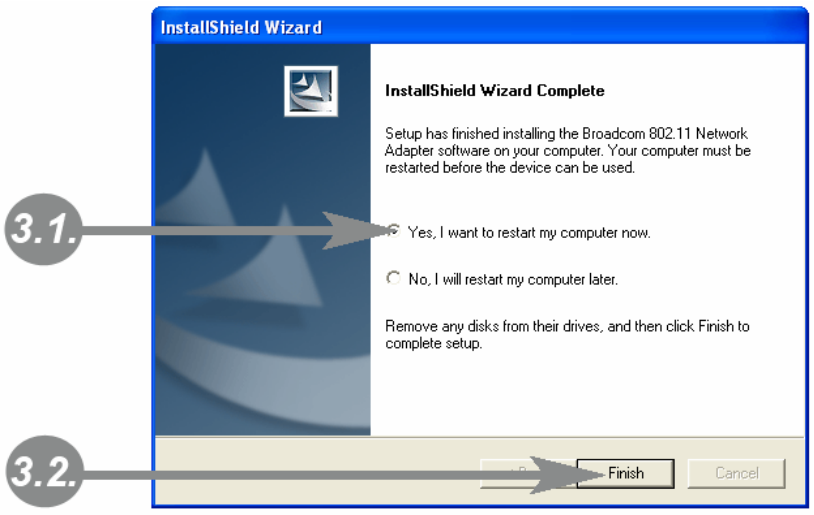
2. On the welcome screen, click **Next**, and then the installation begins.





3.1. Select restart your computer right now or later.

3.2. Click **Finish**.


InstallShield Wizard
InstallShield Wizard Complete
Setup has finished installing the Broadcom 802.11 Network Adapter software on your computer. Your computer must be restarted before the device can be used.
3.1.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
3.2.
Finish
Cancel

5.

Power Management

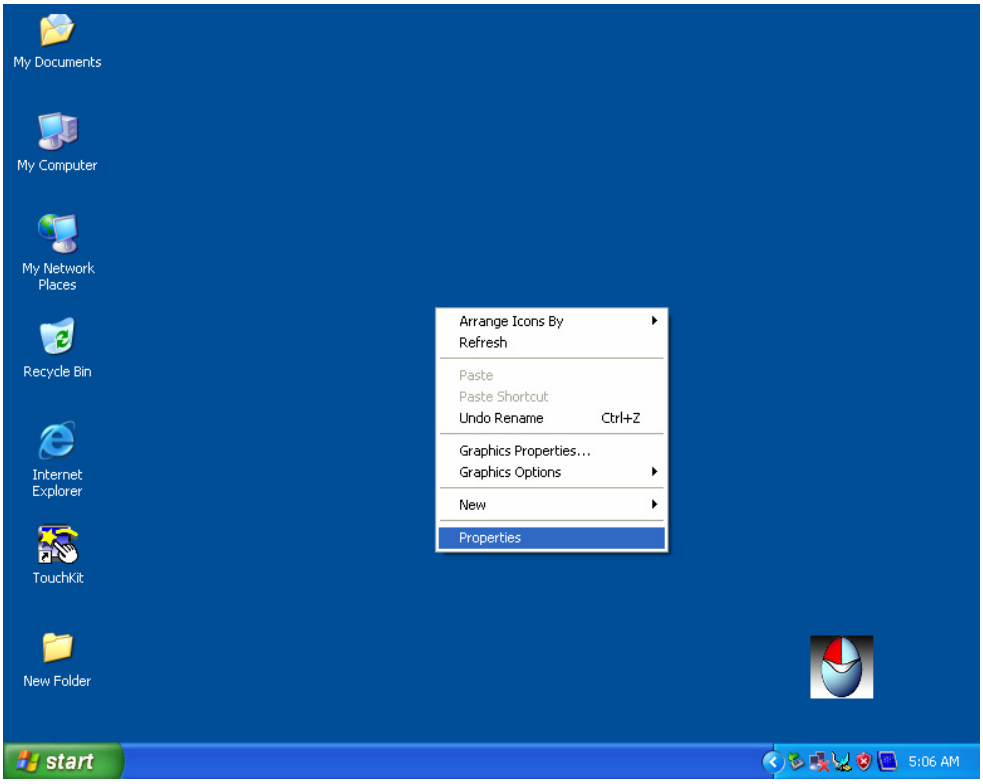
The backup battery equipped on Greenland 70 series is as “smart” as the battery for Notebook or handheld device; you can adjust any power management option that your unique hardware configuration supports.

5.1. Enter Power Option Properties Sheet

There are two alternatives to enter **Power Options Properties** property sheet.

Option 1:

1. Right-click on the Desktop and select **Properties**.



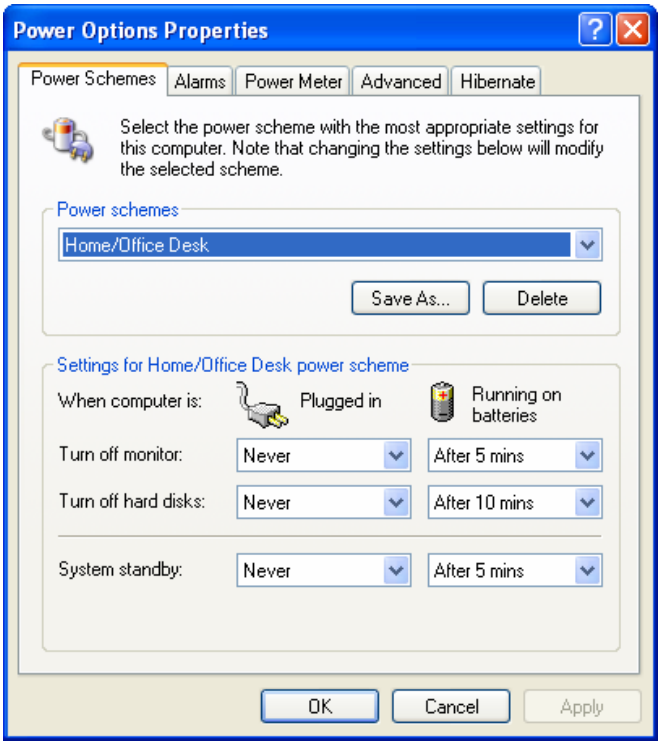
2. Click **Screen Saver** tab, and then click **Power** button.

Option 2:

1. Click **Start**, click **Settings**, click **Control Panel**, and then double-click **Power Options**.

5.2. How to Set Power Options

Power Schemes



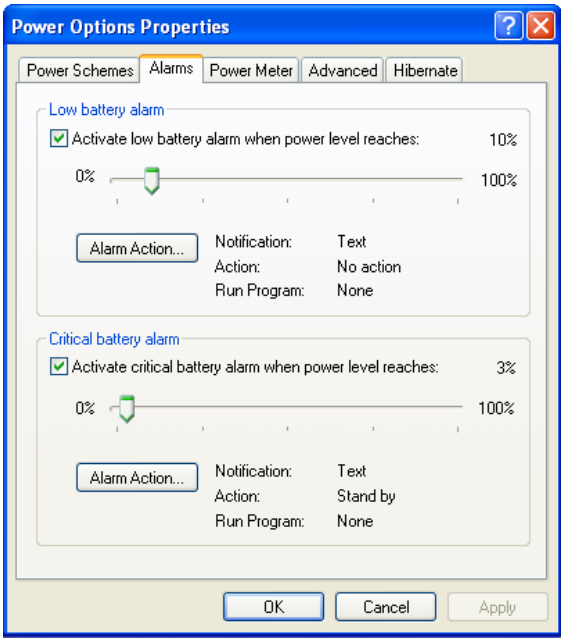
You can configure power settings under **Power Schemes** tab**.**

Under **Power schemes** area, click the drop-down list to choose a power scheme to apply settings that fit the way you use Greenland 70.

Under **Settings for Home/Office Desk Power scheme** area, set all parameters by clicking drop-down lists to put GREENLAND 70 on standby mode and turn off your monitor and hard disks automatically to save power upon your actual needs.

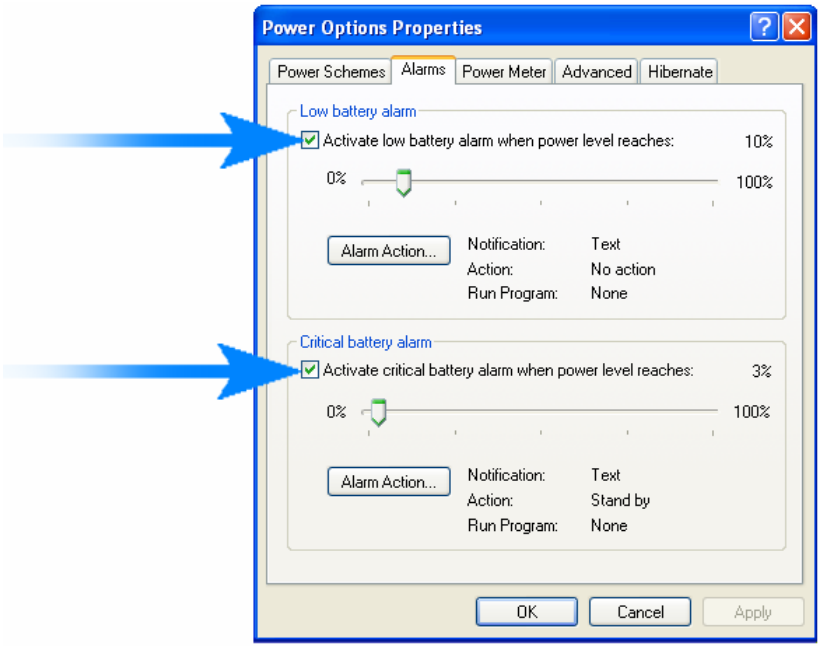
Alarms

You can set two kinds of low battery warning you'll receive when battery power gets low and what action will be taken for GREENLAND 70 under **Alarms** tab.



Low battery alarm and Critical battery alarm

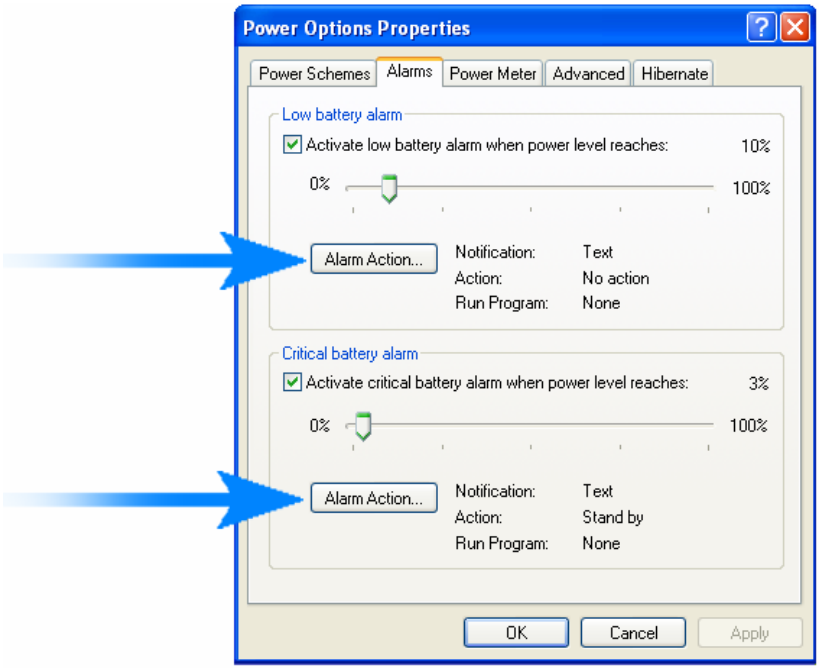
Check the box to enable **Low battery alarm** and **Critical battery alarm** function.



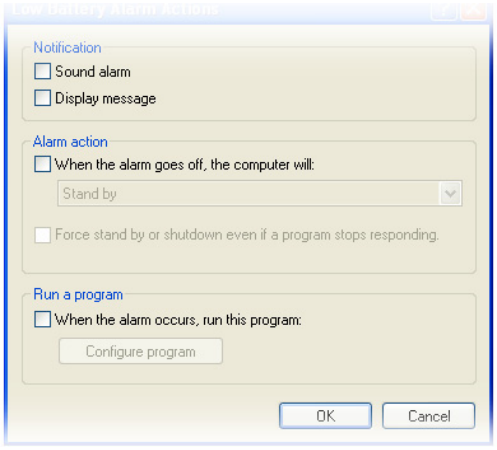
Specify how much power level to activate these two alarms by dragging the green-white slider.

Alarm Action

Click **Alarm Action** to enter alarm actions setting sheet.



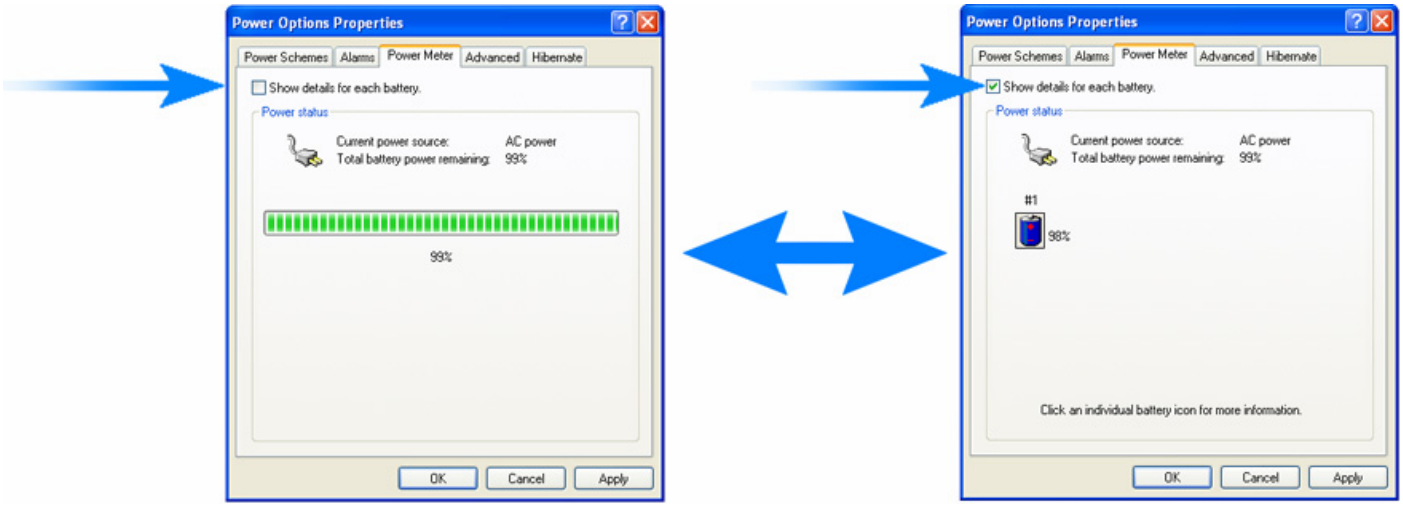
On alarm actions setting sheet, select the type of alarm notification, which action GREENLAND 70 will take and which program will launch when the alarm occurs.



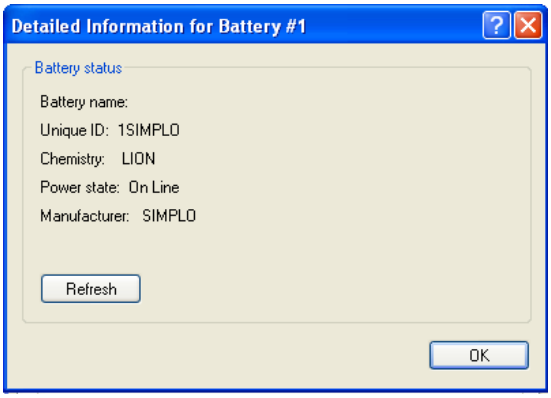
Power Meter

You can check power status under **Power Meter** tab.

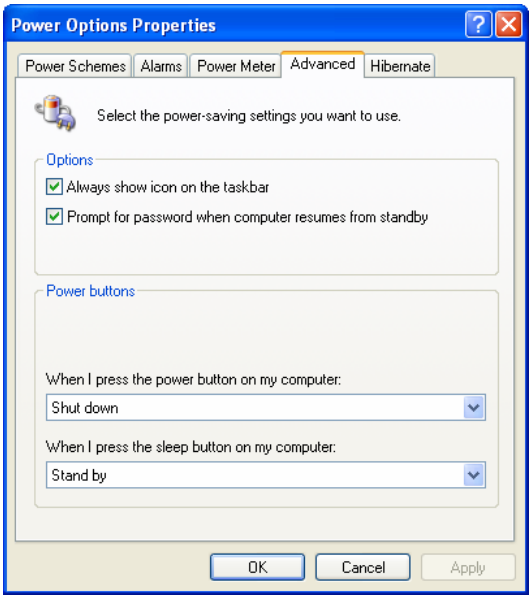
Check or uncheck the box to switch icon view and bar chart view.



Under the icon mode, click the battery icon to show the detailed information about the battery.



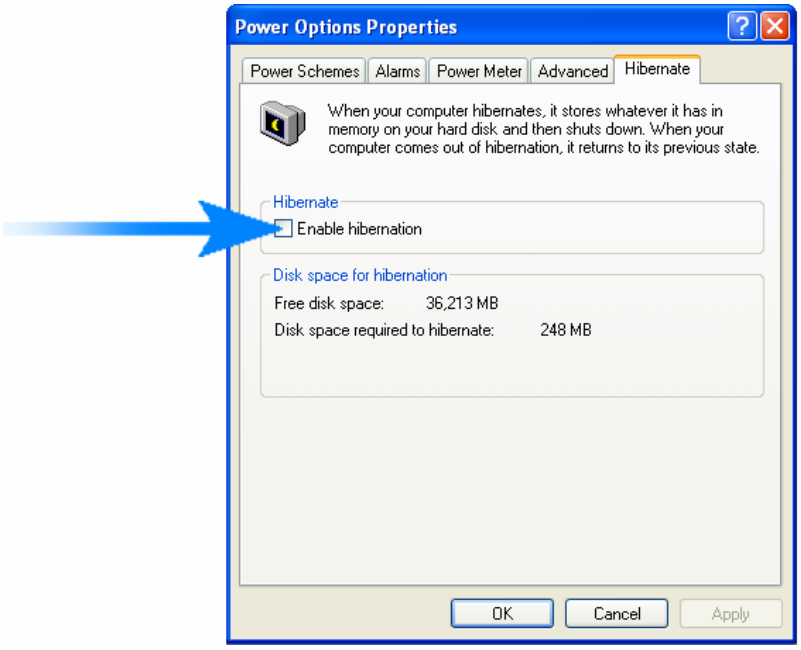
Advanced



You can specify power-saving settings by checking boxes in Options area and clicking drop-lists in Power button under **Advanced** tab.

Hibernate

Enable the hibernate function by checking **Enable hibernation** box.


Power Options Properties
Power Schemes
Alarms
Power Meter
Advanced
Hibernate
When your computer hibernates, it stores whatever it has in memory on your hard disk and then shuts down. When your computer comes out of hibernation, it returns to its previous state.
Hibernate
Enable hibernation
Disk space for hibernation
Free disk space: 36,213 MB
Disk space required to hibernate: 248 MB
OK
Cancel
Apply

6.

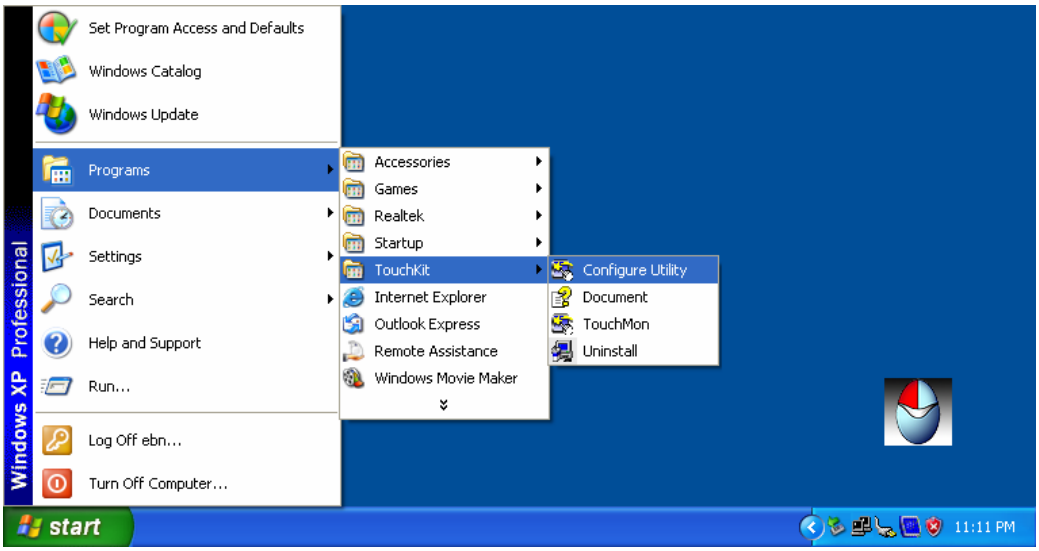
TouchKit Utility Quick Guide

6.1. Launch TouchKit Utility

There are two alternatives to launch **TouchKit**.

Option 1:

Under Microsoft Windows XP, click “**start**” menu and select “**Programs**”, under ”**TouchKit**” menu, click “**Configure Utility**”.

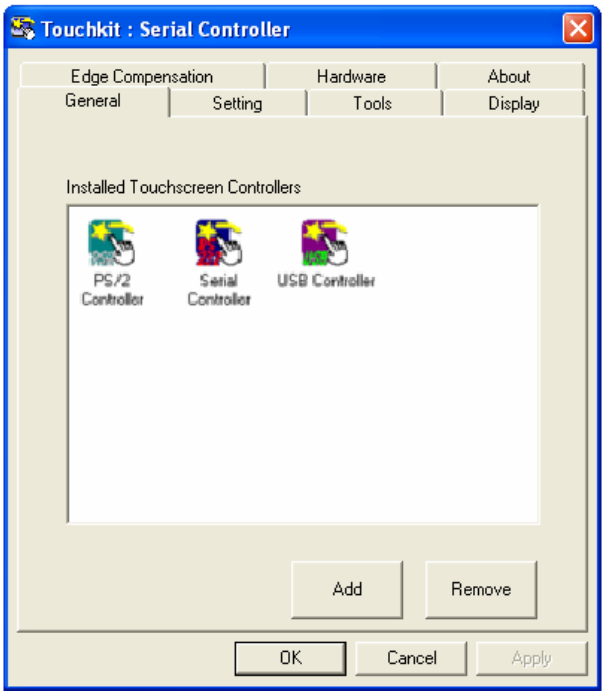


Option 2:

Click icon on the task bar to launch **TouchKit** utility.

6.2. General

The **General** tab in **Touchkit utility** shows all of **TouchKit** touchscreen controllers installed as below, including RS232, USB and PS2 interfaces.



Add

The function button is used for serial RS232 controllers only. Press this button to search the **TouchKit** serial controllers connected with the COM ports of Greenland 70. Whenever it finds a new **TouchKit** serial controller, a new serial controller icon object will be shown in the controller list window automatically.

USB **TouchKit** device supports plug and play, the icon object for USB controller will be shown in the controller list window automatically when the USB controller is connected with the USB port of Greenland 70. And, the icon object for the USB controller will disappear automatically as soon as the device was removed from the USB port of Greenland 70.

TouchKit PS2 driver support PS2 mouse and **TouchKit** touchscreen controller. It can works with both PS2 mouse and **TouchKit** touchscreen PS2 controller. After the **TouchKit** PS2 driver was installed, this utility assumes the PS2 touchscreen controller exists and

is always shown in the controller list window.

Remove

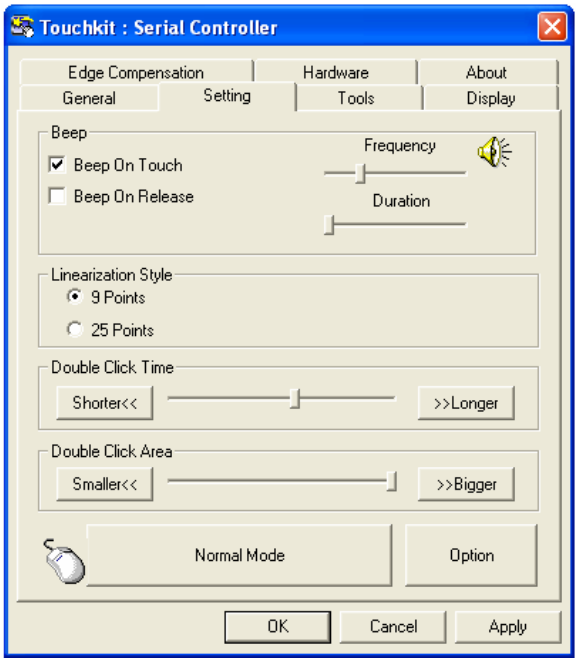
This function button is used for serial RS232 controllers only. This button will be grayed and disabled automatically when the selected controller in the controller list window is not RS232 type. Press to remove and uninstall the selected serial RS232 controller from Greenland 70. Then, this serial RS232 icon object in controller list window disappears automatically.

USB TouchKit device supports plug and play, the icon object for USB controller will be shown in the controller list window automatically when the USB controller is connected with the USB port of Greenland 70. And, the icon object for the USB controller will disappear automatically as soon as the device was removed from the system USB port.

TouchKit utility does not allow you to remove/uninstall the PS2 device driver dynamically. To uninstall the **TouchKit** PS2 driver, You needs to go to Windows Device Manager to do un-installation. In addition, after PS2 un-installation, it needs to reboot GREENLAND 70 to complete un-installation.

6.3. Settings

There are function buttons and check boxes in the **Settings** tab.



Beep

Beep On Touch

Check this check box to enable driver to generate a beep sound when touch touchscreen state is switched from untouched to touched state.

Beep On Release

Check this check box to enable driver to generate a beep sound when touchecreen state is switched from touched state to untouched state.

Frequency

Drag the slider to adjust this frequency to control the beep sound frequency generated by the driver.

Duration

Drag the slider to adjust this duration to control the beep sound duration.

Linearization Style

TouchKit utility provides you with both 9 points and 25 points calibration for linearization. You can select the suitable linearization type.

Double Click Time

Double Click Time is used to set double click time. Change this value will affects the double click behavior for all of the mouse devices connected to Greenland 70. Two continuous clicks at the same area within this specified time period will be recognized as a double click event.

Double Click Area

Double click area is used to set the double click area. Change this

value will affects the double click behavior for all of the mouse devices connected to Greenland 70. Two continuous clicks with this specified area in the specified double click time will be recognized as a double click event.

Mouse Emulation Mode

Change the emulation mode by pressing on this button.

Normal Mode

Normal mode behaves mouse button down and mouse move. You can select this mode to select object, and dragging the object.

Click On Touch

With this **Click On Touch** mode, the driver emulates a mouse click event when the touchscreen state was switched from un-touched state to touched state. Then, the driver always generate mouse move event and is tracking the touch position until the touchscreen state switched to un-touch state.

Click On Release

With this **Click On Release** mode, the driver emulates a mouse click event when the touchscreen state was switched from touched state to un-touched state.

Click On Touch without moving cursor

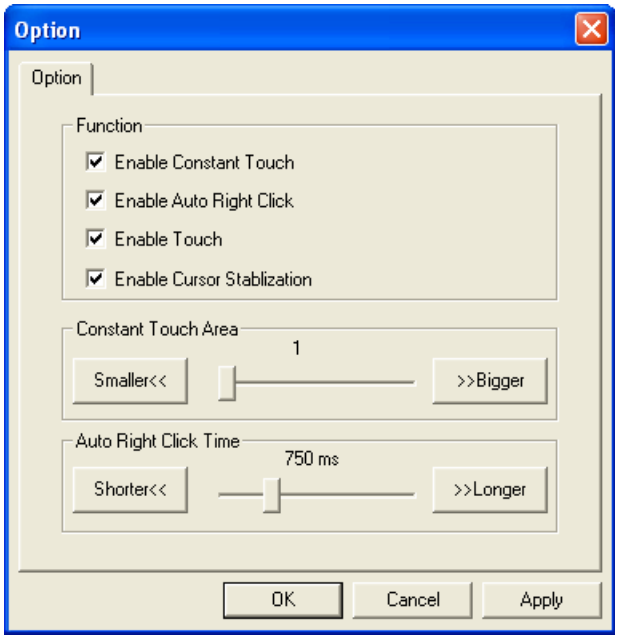
With this mode, the driver behaves similar as **Click On Touch** mode. The cursor does not move to the touch position except the first touch point.

Click On Release without moving cursor

With this mode, the driver behaves similar as **Click On Release** mode. The cursor does not move to the touch position except the lift-off point.

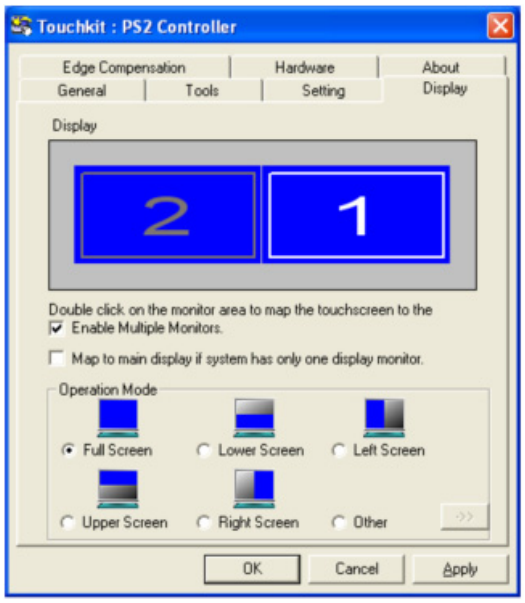
Option

You can set configuration for some advanced functions with this option button. Press this button, a pop up property sheet window will be popped up and shown as below.



6.4. Display

TouchKit driver utility supports multiple monitor and display system. To work with multiple monitor system, you need to do proper configuration to map the touchscreen working area to the correct system display area. You can do such configuration with this property page shown as below,



Please follow below instructions to do the configuration:

Enable multiple monitor

Check this check box to enable multiple monitor support and uncheck it to disable multiple monitor support. When this function is disabled, the touchscreen will be mapped to the primary monitor automatically.

When this function is enabled, user can double click on the monitor area in the monitor geometry window to assign the monitor area where the touchscreen will be mapped. In other word, the touchscreen will work with the selected monitor. Then, the selected monitor area rectangle line will be changed to be white and the other monitor rectangles line will be grey.

Map to main monitor when the system has only one monitor

When the multiple monitor function was enabled, and the system has only one monitor.

Driver allows user to generate the mouse event for the primary monitor or not when the touchscreen which were not mapped to primary monitor. Check the check box to enable this function, then, the driver will generate the mouse event for the primary monitor even through the touchscreen was configured as other monitor mapping and multiple monitor function enabled.

Operation Mode

TouchKit driver support split display mode for those applications which do not map the touchscreen to the full screen of the monitor.

Full screen

The touchscreen will be mapped to the full screen of the specified monitor.

Right screen

The touchscreen will be mapped to the right half screen of the specified monitor.

Left screen

The touchscreen will be mapped to the left half screen of the specified monitor.

Upper screen

The touchscreen will be mapped to the upper half screen of the specified monitor.

Lower screen

The touchscreen will be mapped to the lower half screen of the specified monitor.

Other operation mode

Quarter 1

The touchscreen will be mapped to the first quarter area of the specified monitor display.

Quarter 2

The touchscreen will be mapped to the 2nd quarter area of the specified monitor display.

Quarter 3

The touchscreen will be mapped to the 3rd quarter area of the specified monitor display.

Quarter 4

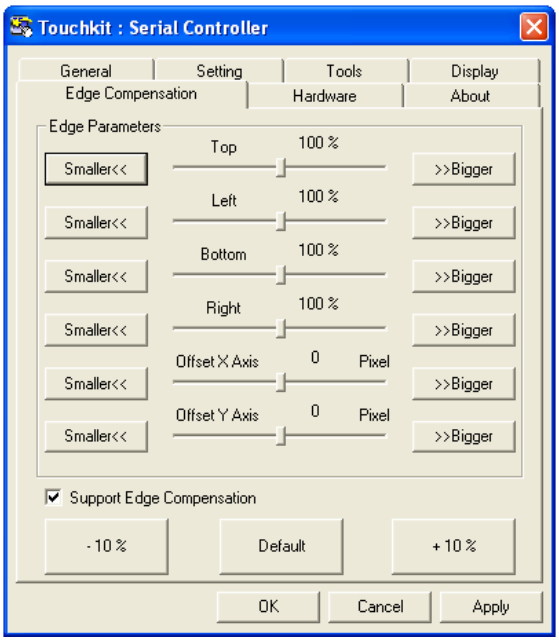
The touchscreen will be mapped to the 4th quarter area of the specified monitor display.

Customized

If the touchscreen needs to be mapped the area other than the above area, user can define the mapping area for application. With this mode, the driver does not correct the mapping area when the display resolution changed. It needs to do configuration setting again whenever the display resolution changed.

6.5. Edge Compensation

Edge Compensation property page contains functions of **Edge Compensation** for Top, Bottom, Left, Right, X Axis and Y Axis.



In some cases, if it is difficult to touch items at the edges of the touch panel, you can set adjustment to reach the edges of the screen image.

Top

If you set the Edge to "Smaller", **TouchKit** will reduce the horizontal position of the top edge. If you set the Edge to "Larger", **TouchKit** will extend the horizontal position of the top edge.

Bottom

If you set the Edge to "Smaller", **TouchKit** will reduce the horizontal position of the bottom edge. If you set the Edge to "Larger", **TouchKit** will extend the horizontal position of the bottom edge.

Left

If you set the Edge to "Smaller", **TouchKit** will reduce the vertical position of the right edge. If you set the Edge to "Larger", **TouchKit** will extend the vertical position of the left edge.

Right

If you set the Edge to "Smaller", **TouchKit** will reduce the vertical position of the right edge. If you set the Edge to "Larger", **TouchKit** will extend the vertical position of the right edge.

In some cases, cursor will be behind the finger when you touch the panel. If you can not see the cursor when you touch down the panel, you can set **X Axis** or **Y Axis** to move the cursor.

Offset X Axis

If you set the Offset X Axis to Smaller, cursor will be moved a pixel of X Axis to left.

If you set the Offset X Axis to Larger, cursor will be moved a pixel of X Axis to right.

Offset Y Axis

If you set the Offset Y Axis to Smaller, cursor will be moved a pixel of Y Axis to top.

If you set the Offset Y Axis to Larger, cursor will be moved a pixel of X Axis to bottom.

Edge Compensation Switch

You can check **Support Edge Compensation** check box to enable/disable this function from left corner.

Edge Compensation Button

Click **+10%** or **-10%** button to adjust the smaller or larger of edge. If you click **+10%** button, the top, bottom, left and right edges will extend 10% of orientation to touch screen, and cursor will be moved 10 pixel of X and Y Axis to right and top.

If you click **-10%** button, the top, bottom , left and right edges will contract 10% of orientation to touch screen, and cursor will be moved 10 pixel of X and Y Axis to left and bottom.

Click **Default** button to resume to the default value.

6.6. How to Use Event Selector

1. On the desktop of Windows, click icon.
2. icon change to .
3. Now the tapping is simulating right mouse button clicking.
4. After one tap on the screen, icon change to .
5. The tapping resumes to left mouse button clicking.

7.

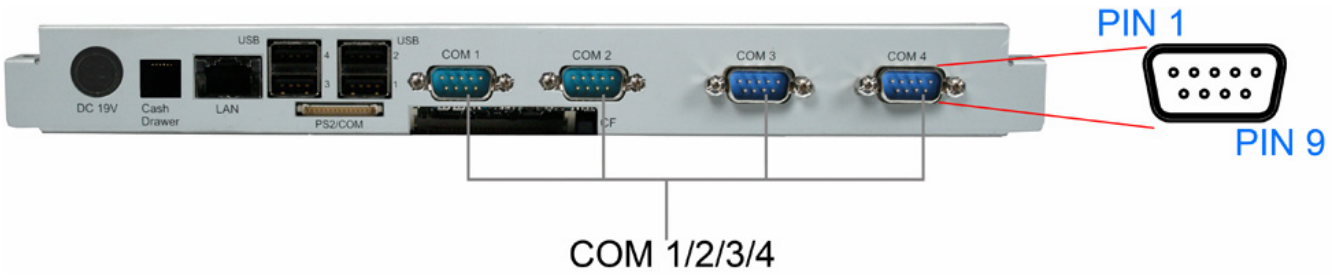
I/O Definition

Please refer the detailed technical information about all I/O ports as followings.

7.1. Power Connector

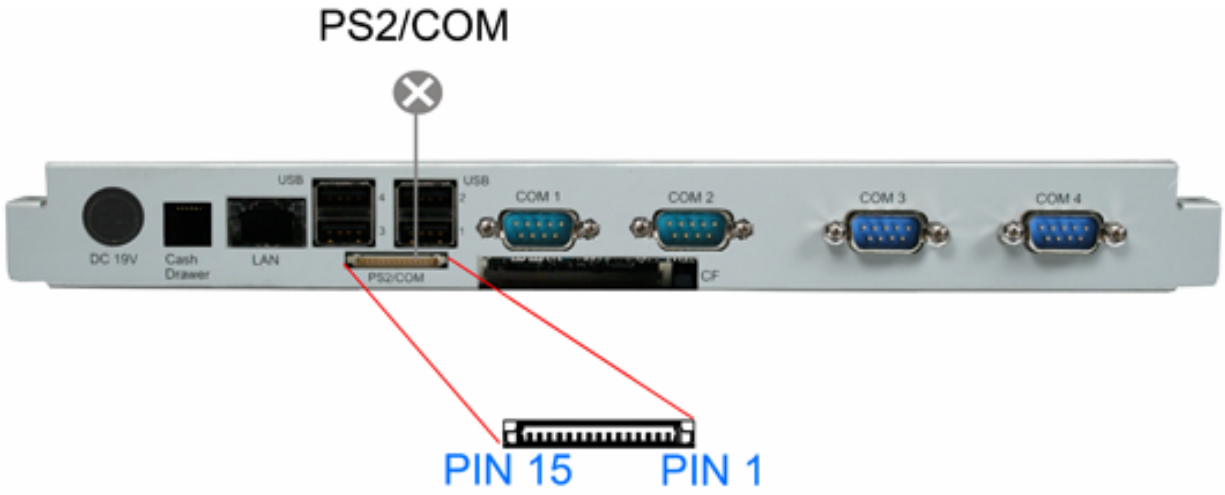
PIN	Description	PIN	Description
1	+19V	3	GROUND
2	+19V	4	GROUND

7.2. Serial Port



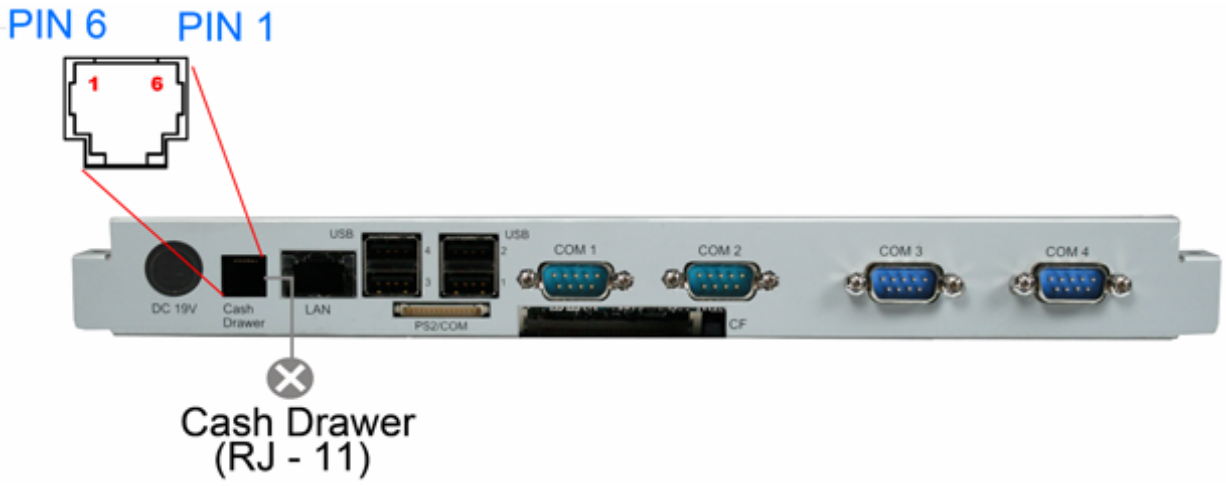
COM Port 1/2/3/4			
PIN	Description	PIN	Description
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	RI / 5V /12V
5	GND	10	NC

7.3. PS2/COM



PS2/COM					
PIN	Description	PIN	Description	PIN	Description
1	GND	6	PC_CLK)KEYBOARD)	11	CTS
2	+5V	7	KB_DAT	12	RTS
3	RXD	8	KB_CLK	13	DSR
4	TXD	9	RI / 5V /12V	14	DCD
5	PC_DAT (KEYBOARD)	10	DTR	15	KB_EN

7.4. Cash Drawer



Connector

PIN	Description	PIN	Description
1	GND	4	12V
2	D_OUT	5	NC
3	D_IN	6	GND

Cash Drawer Control

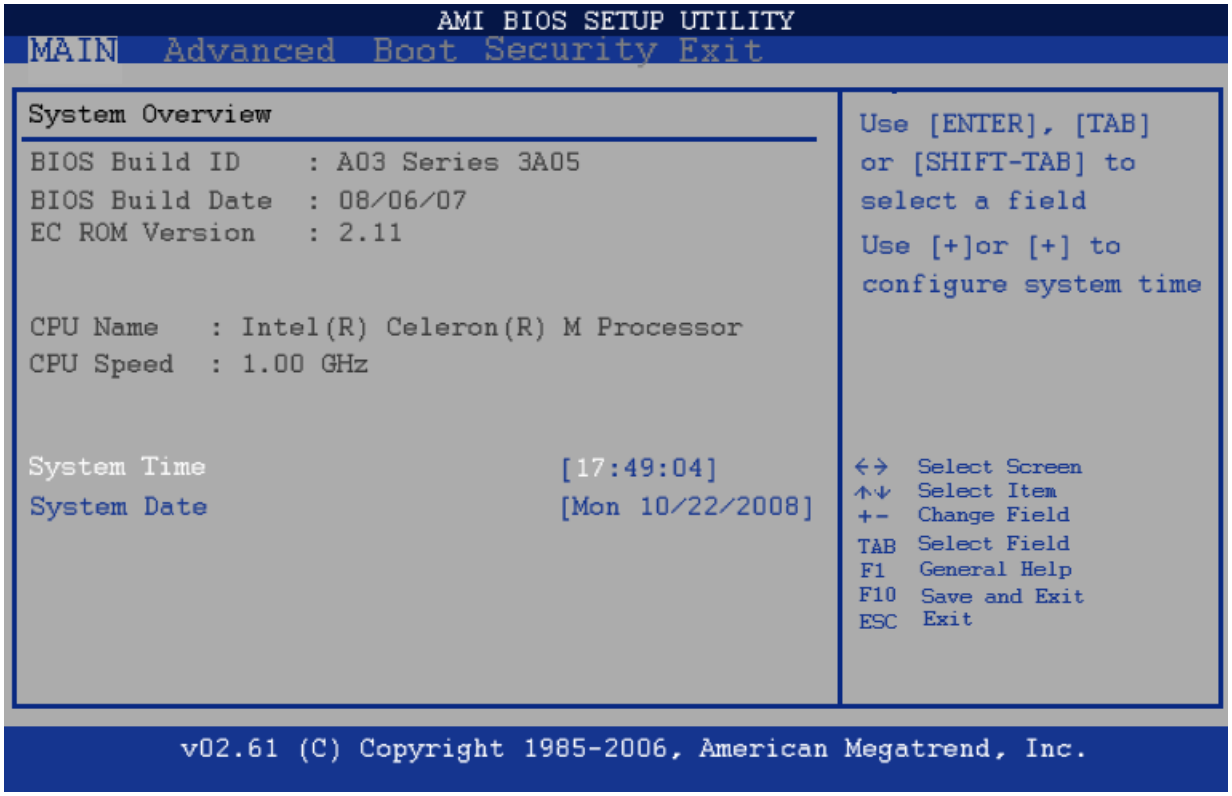
Status	Address	Value
Open	280H	Bit 4 = 0
Close	280H	Bit 4 = 1
Read Status	281H	Bit 0 = 0/1

8.

BIOS setup

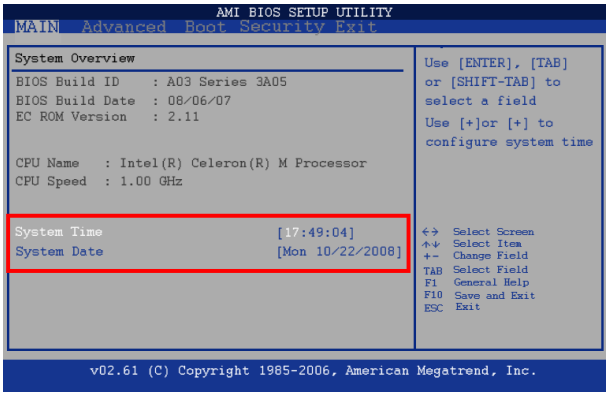
1. Press and hold the power switch until the power indicator on the front panel glow green.

2. Before Windows launch, Press the “Delete” key to enter he BIOS.


AMI BIOS SETUP UTILITY
MAIN Advanced Boot Security Exit
System Overview
BIOS Build ID : A03 Series 3A05
BIOS Build Date : 08/06/07
EC ROM Version : 2.11
CPU Name : Intel(R) Celeron(R) M Processor
CPU Speed : 1.00 GHz
System Time [17:49:04]
System Date [Mon 10/22/2008]
Use [ENTER], [TAB] or [SHIFT-TAB] to select a field
Use [+]or [+] to configure system time
Select Screen
Select Item
+- Change Field
TAB Select Field
F1 General Help
F10 Save and Exit
ESC Exit
v02.61 (C) Copyright 1985-2006, American Megatrend, Inc.

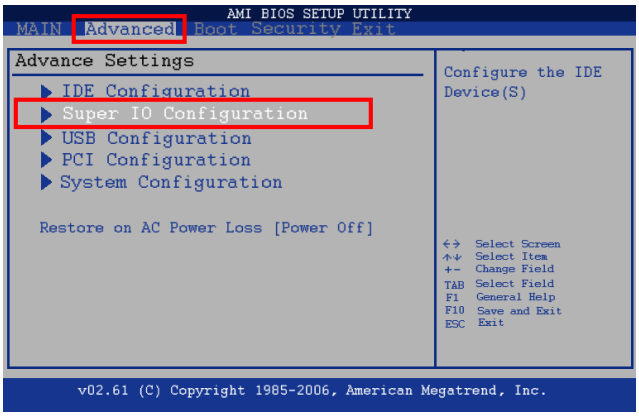
8.1. System Time and System Date Adjustment

1. Under the Main tab, press the four arrow keys to high light the System Time and System Date to configure.

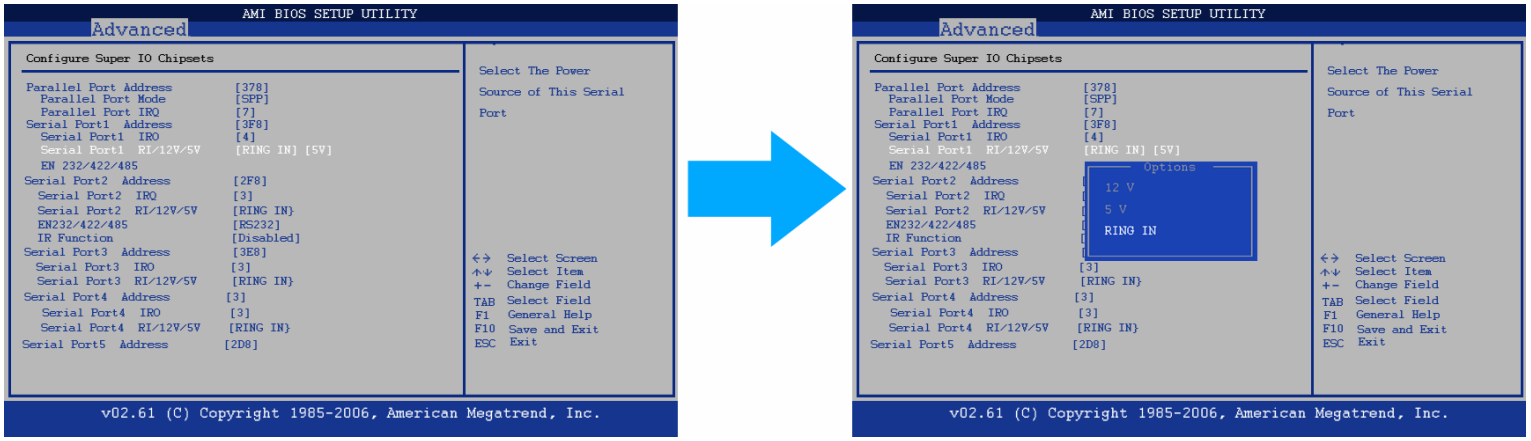

AMI BIOS SETUP UTILITY
MAIN Advanced Boot Security Exit
System Overview
BIOS Build ID : A03 Series 3A05
BIOS Build Date : 08/06/07
EC ROM Version : 2.11
CPU Name : Intel(R) Celeron(R) M Processor
CPU Speed : 1.00 GHz
System Time [17:49:04]
System Date [Mon 10/22/2008]
Use [ENTER], [TAB] or [SHIFT-TAB] to select a field
Use [+]or [+] to configure system time
Select Screen
Select Item
Change Field
Select Field
General Help
Save and Exit
Exit
v02.61 (C) Copyright 1985-2006, American Megatrend, Inc.

8.2. Serial ports Configuration

1. Press "→" key to switch to "**Advanced**" tab and press "↓" to highlight "**Super IO Configuration**", and then press the Enter key to switch to the **Configure Super IO Chipsets** screen.

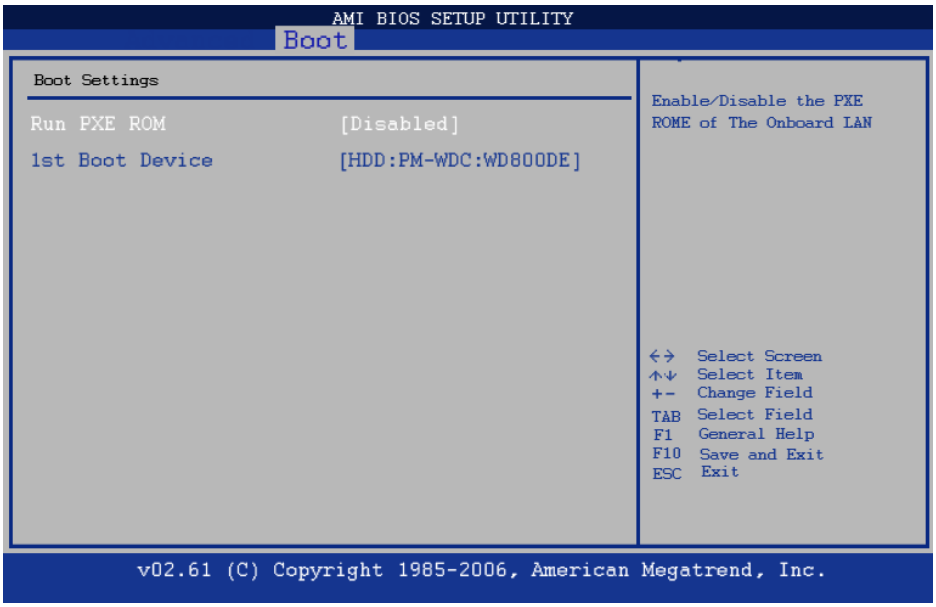


2. Pressing arrows keys to set every serial port power source, and then press **F10** to save your configuration and exit.



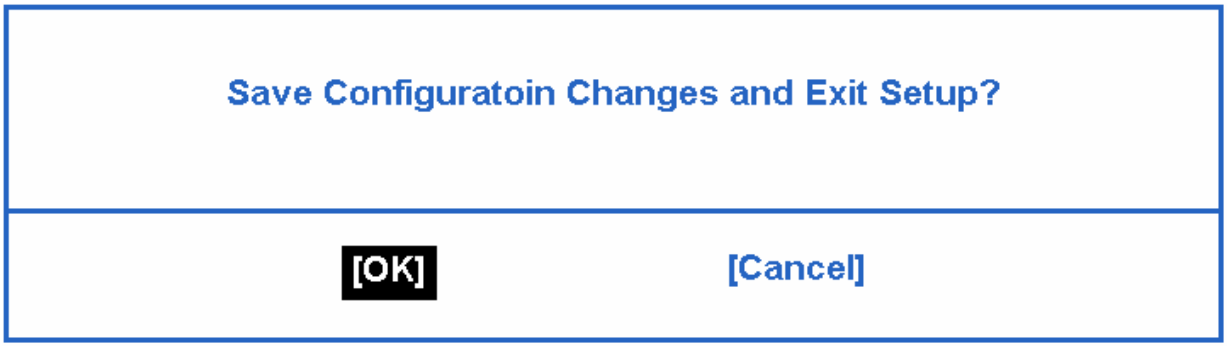
8.3. Boot Device Configuration

1. Press "→" key to switch to "**Boot**" tab and press "↓" to configure the boot device



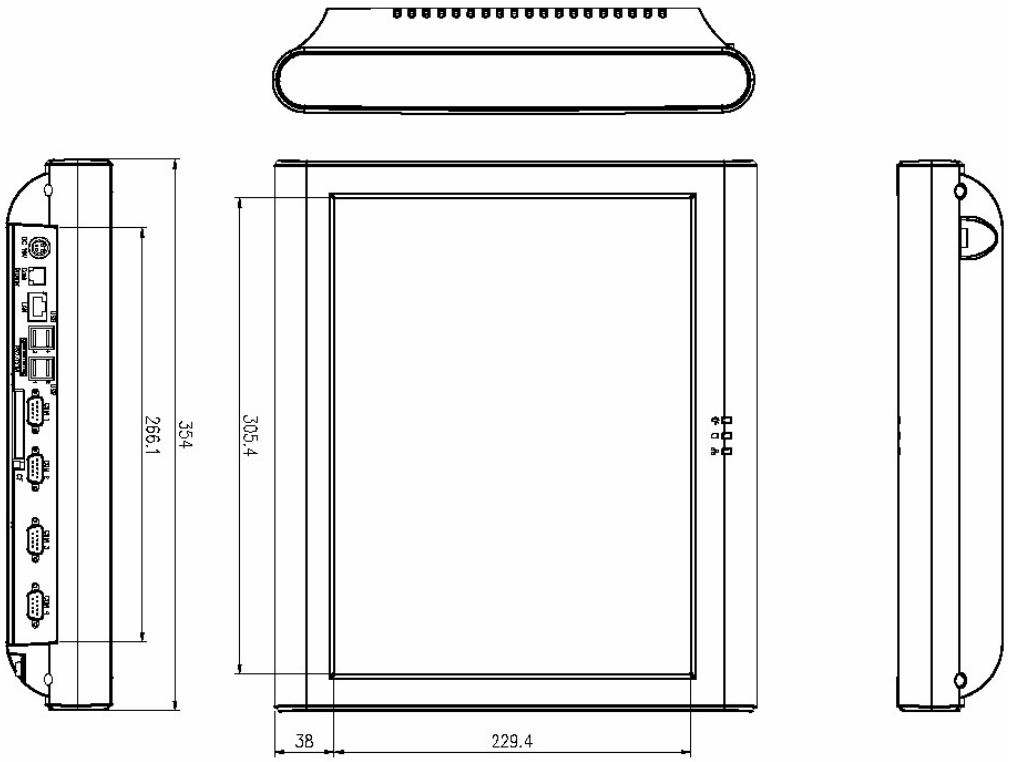
8.4. Save Configuration Changes and Exit

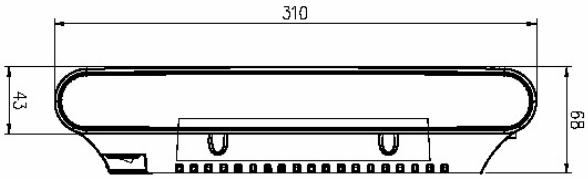
Press F10 key and highlight the [OK] on the message box and press the Enter Key.

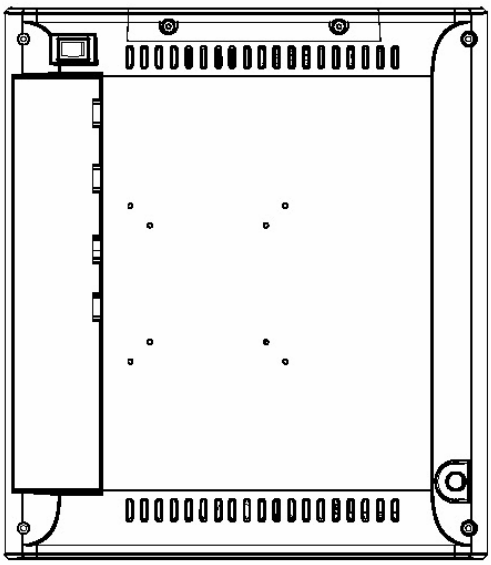


9.

Specification







TOLERANCES	
.X ± 0.2	X° ± 0.25
.XX ± 0.1	.X° ± 0.15
.XXX ± 0.05	.XX° ± 0.05

Main Board	
CPU	Intel Ultra Lo Voltage Celeron M 1GHz w/o L2 cache Intel Ultra Lo Voltage Celeron M 1.5GHz w 1MB L2 cache
Chipset	Intel 852GM + ICH4
System Memory	SO-DIMM DDR 200/266, 128MB up to 1GB
Thermal Solution	Fan-less
OS	WinXP, WEPOS, WinCE.Net 5.0, Linux (Fedora Core 5, Suse 9)
Storage Device	
HDD	1 x IDE, 2.5” HDD Drive Bay
Compact Flash	1 x Slot Compact Flash Type II
I/O Ports	
Serial	5 x RS-232, 1 x RS-232/422/485 COM1: DB-9, RS-232/422/485, Pin9 w/ RI/5V/12V Selectable by BIOS COM2/3/4: DB-9, RS-232, Pin9 w/ RI/5V/12V Selectable by BIOS COM5: Internal Pin Header COM6: Internal for Touch Panel
USB	4 x USB 2.0
LAN	1 x Gigabit Ethernet by RJ-45
Cash Drawer	1 x RJ11 (12V DC)
Audio	AC’ 97 2.0 Compliant, 2W Speaker * 2
Expansion	Mini-PCI x 1
Others	
Power Supply	External adapter, 135W, 19V DC input
UPS Power Backup	Support Smart Battery 4P1S backup function
EMC Compliance	FCC / CE
Weight	17”: 8.7 (Approx.) 19” 9.5 (Approx.)
Material	Front bezel - Plastic Rear cover - Die-Casting Aluminum
Product Dimension	354 x 358 x 232 mm (WxHxD)
Carton Dimension	540 x 500 x 400 mm (WxHxD)
W-LAN (Option)	802.11g Wireless LAN module
Operating Temperature	5°C – 35°C
Storage Temperature	-20°C – 60 °C
Humidity	20% – 85% RH, non-condensing